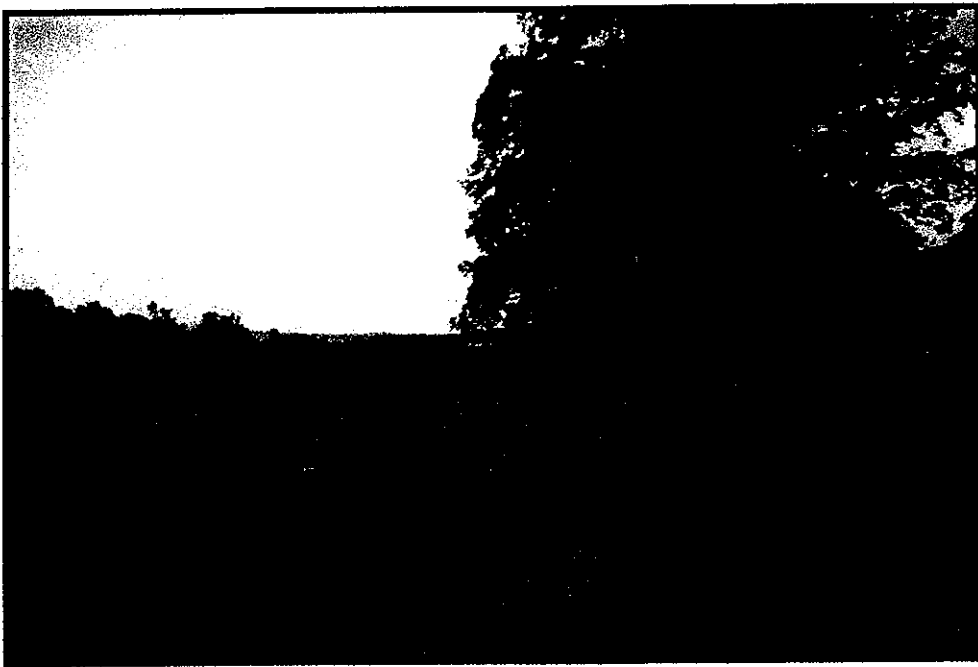


# **Lunenburg, Massachusetts**

Updated Master Plan

For

**The New Millennium**



Lunenburg Planning Board

April 2002

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1. The first part of the document is a letter from the President of the United States to the Congress, dated January 1, 1861. It is a very important document, as it is the first official communication of the new President to the new Congress. It is a letter of introduction, and it is a letter of policy. It is a letter that sets the tone for the new administration, and it is a letter that is read with great interest and with great expectation.



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# LUNENBURG MASTER PLAN

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## **VISION: Lunenburg 2007**

A fiscally responsible Town with an active community lifestyle, working to preserve the character of the Town and to serve its citizens with appropriate municipal services, housed in suitable municipal facilities.

## **INTRODUCTION**

### **The Master Plan**

*A Master Plan is defined by Massachusetts General Laws as a "Statement, through text, maps, illustrations, or other forms of communication, which is designed to provide a basis for decision-making regarding the long-term physical development of the municipality."* [Chapter 41, section 81-D] The Planning Board of a town is charged with developing the Master Plan and maintaining it in an updated currency. The statute lists the parts of a Plan as consisting of *Goals* (that are created through an interactive public process), and *Chapters on Land Use, Housing, Economic Development, Natural Resources, Open Space, Services, and Circulation*, and a final section presenting recommendations for *Implementation* of the Plan.

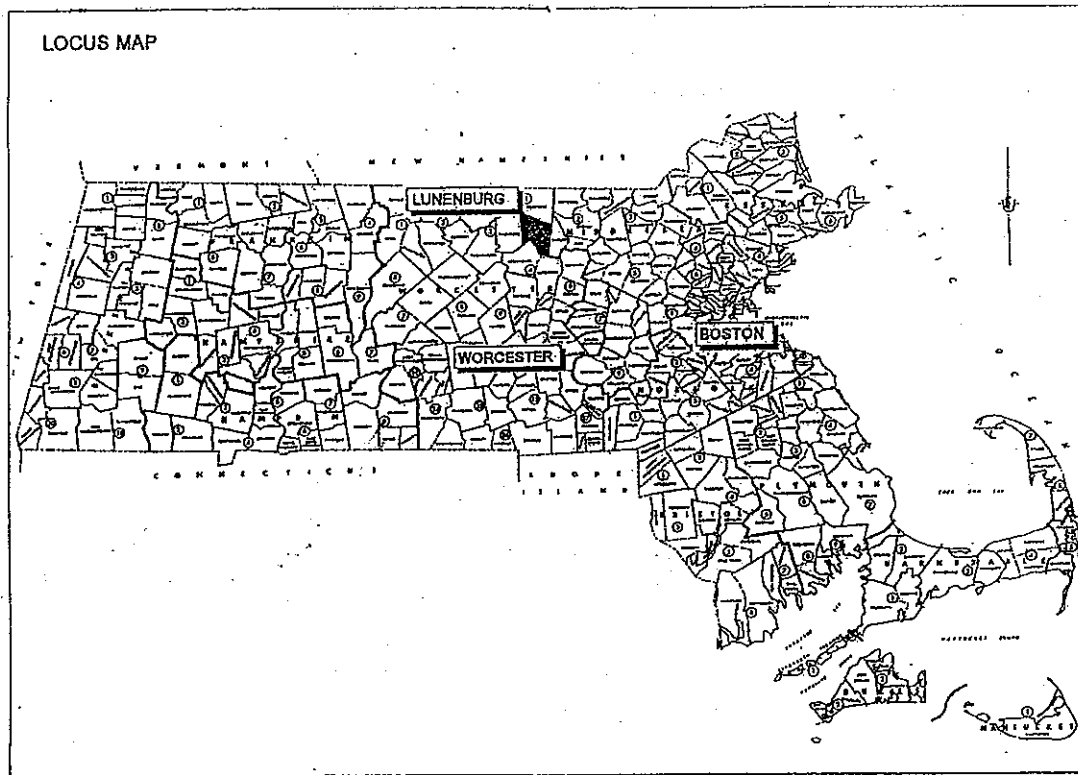
Lunenburg's first *Master Plan* was prepared in 1961<sup>1</sup> and updated in 1983<sup>2</sup>. The Planning Board has been preparing this third update over several years' time, assisted by its planning consultant. The Planning Board also established committees to help it update the Plan. At the same time, the Planning Board evaluated Town sewers and their impact on community character and growth.

<sup>1</sup> *A Plan for Lunenburg's Future*, Allen Benjamin, Town Planning Consultant, Wayland, MA, 1961

<sup>2</sup> *Lunenburg Master Plan*, Anderson Nichols, Boston, MA, 1982

## Lunenburg Locus Map

Map 1-1





## The *Visioning* Process

The *Vision* is the community consensus or 'perception' of the kind of Town it desires to be. *Goals* are the means to attain this *Vision*. *Goals* provide a sense of direction towards attaining the *Vision*. *Policies* are guidelines and principles that are used to achieve the *Goals*.

Lunenburg citizens have recognized the beauty of their Town and the attributes that make it a pleasant place to live. As early as 1961, the Planning Board articulated residents' concern "*to minimize the impact of residential development on the remaining rural character of the Town*".<sup>3</sup> Since then, residential growth has continued steadily, accompanied by increasing commercial development. This growth has led to several efforts to clearly define Lunenburg's *Vision* for the future, as well as its *Goals and Policies*. These *Goals and Policies* will serve as the basis for all Town plans. The Lunenburg Planning Board held several Forums in order to develop Lunenburg's *Vision, Goals, and Policies*. Residents attending the *Visioning* Forums represented all sections of the Town, and many differing interests.

The *Goals* articulated in the 1984 *Master Plan*<sup>4</sup> were reviewed and slightly revised when the 1989 *Growth Management Plan* was developed.<sup>5</sup> In 1998, the Planning Board convened an *Envision Study* that developed the *Vision for 2007* through focus meetings. It also reinforced the *Goals and Policies* that were previously determined, and set the framework for the updated *Master Plan*. That Report, *Appendix A*, provides the basis for the 2000 *Master Plan*. Community members wrote the Report during the *Envision* process.

## Planning Goals

*Planning Goals and Policies*, adopted by the Planning Board in connection with the 1989 *Growth Management Plan*, were predicated on the Town remaining unsewered. The Planning Board reviewed these *Goals and Policies* in 1995 and again in 1999 and 2000 in order to determine their applicability to a Town now having sewers. The Board decided that the *Goals* as stated remain valid, and only minor revisions were needed to the *Policies*. These revisions to *Policies* were not the result of the addition of sewers, but rather were due to the passing of time. The addition of sewers to Town will in fact assist in achieving several *Goals*, e.g., '*to encourage economic development*' and '*to protect natural resources*'. The Planning Board is continuously working toward implementing its *Policies* so that the Town may achieve its *Goals*. The *Goals and Policies* are listed on page 4.

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<sup>3</sup> *A Plan for Lunenburg's Future*, op. cit.

<sup>4</sup> *Lunenburg Master Plan*, op.cit.

<sup>5</sup> *Growth Management Plan*, Thomas Planning Services, Boston, MA, 1989

## GOALS AND POLICIES

### **GOAL - To Preserve The Rural Residential Characteristics Of The Town**

- Policy: Preserve the aesthetic quality of the Town.
- Policy: Protect critical environmental areas in the Town.
- Policy: Maintain the existing diversity of land use within the Town.
- Policy: Focus development where adequate infrastructure either exists or may be economically provided.
- Policy: Maintain the existing land use density and intensity regulations.
- Policy: Reinforce "New England" type of the Town Center.

### **GOAL - To Promote More Efficient Land Use**

- Policy: Encourage the preservation of the rural residential character of the Town.
- Policy: Encourage development that insures open space.
- Policy: Balance development with the ability to provide appropriate services.

### **GOAL - To Encourage Economic Development In The Town**

- Policy: Improve existing industrial and commercial areas.
- Policy: Encourage industrial and commercial development that is compatible with available resources and facilities, and which provide job opportunities to residents.
- Policy: Augment the tax base.
- Policy: Implement the *Sewer Impact Study*.
- Policy: Encourage non-residential growth in sewered areas.

### **GOAL - To Protect Natural Resources**

- Policy: Provide appropriate development restrictions for the areas near lakes, wetland, and well sites.
- Policy: Protect critical environmental areas.
- Policy: Provide appropriate regulations regarding sewer wastewater and solid wastes.
- Policy: Provide appropriate regulations regarding the water supply.
- Policy: Encourage non-residential growth in sewered areas.

### **GOAL - To Provide Quality Municipal Services for the Residents Of The Town**

- Policy: Provide the highest standard of education.
- Policy: Provide for the needs of all age groups and family types.
- Policy: Provide accessible and diverse community facilities.
- Policy: Provide an adequate range of recreational facilities and programs for all age groups, according to their interests.
- Policy: Plan and facilitate physical improvements through the Capital Budget process.
- Policy: Implement the program in the *Space Needs Study*.
- Policy: Implement the program in the *Open Space Study*.

## FUTURE CONDITIONS

### Population Projections

In 1990, the U.S. Census Bureau reported Lunenburg's population to be 9,117 with 3,486 dwelling units. In 2000, approximately 9,400 persons live in 3,661 dwelling units.<sup>6</sup> Using 1995 as the base year, future population, and, therefore, land use conditions, are projected for a planning period of twenty (20) years, or until the year 2015.

In 1973 Morgenroth and Associates, Inc., in the *Interim Report on a Proposed Sewerage System and Sewage Treatment Facilities*, projected Lunenburg's population into the year 2025. Their projections exceed subsequent ones, as shown in **Table 1-2**, and are not anticipated to be reached. In 1979, the Montachusett Regional Planning Commission (MRPC) prepared population projections for the Town of Lunenburg. MRPC predicted a population of 10,044 for the year 2000, a projection that is near target. It should be noted that all projections were made without anticipating the addition of Town-wide sewers.

### PREVIOUS POPULATION PROJECTIONS

**Table 1-2**

Forecasting Organization	Projected for Year		
	2000	2010	2025
Morgenroth & Associates, Inc. (1973)		14,000	19,000
Montachusett Regional Planning Commission	10,044		
Massachusetts Institute of Social and Economic Research (M.I.S.E.R.) <sup>7</sup>	9,653	10,072	

The actual 2000 population reported by the Census is 9,401 and the buildout projection of the Montachusett Regional Planning Commission is 22,318.

<sup>6</sup> According to the population estimate made for Lunenburg in 1994 by the U.S. Census Bureau.

<sup>7</sup> M.I.S.E.R. figures were released 8.2.99

## ***Envision 2007***

*Top priorities: What Lunenburg is to be in 2007*

### ***MISSION***

To fulfill the vision of a fiscally responsible  
Town with an active community lifestyle,  
Working to preserve the character of the Town  
And to serve the citizens  
With appropriate municipal services  
housed in suitable municipal facilities.

### ***THE PRIORITY PLAN***

- I. Develop an active community concept
- II. Develop programs and processes to  
preserve Lunenburg's community character
- III. Create and develop an effective fiscal policy
- IV. Develop a plan to expand, upgrade and  
maintain municipal services and facilities

## **Cultural Resources and Recreation**

### ***Priority I: Develop an Active Community Concept***

#### ***Task:***

**Create a Community Atmosphere that Encourages Person-To-Person Involvement and Inter-Generational Activities.**

#### ***Objectives:***

1. Develop a 'pedestrian friendly' Town Center, so that people can walk from place to place.
2. Promote Lunenburg's healthy atmosphere and its under-utilized natural recreation resources.
3. Expand the library and other facilities as needed.
4. Develop recreational space (both indoor and outdoor) for inter-generational use.
5. Develop school expansion plans and school interior plans so that the community may use the buildings twelve months a year.
6. Provide additional indoor and outdoor recreational space that meets the needs of an active community.

#### ***Action Plan: Establish a Sense of Place***

1. Complete Lunenburg's Center Plan, and establish guidelines that reinforce the character of the village. (1998)
2. Complete the Town's long-range *Space Needs Study*.
3. Determine future library improvements and expansion plan.
4. Work with community committees to promote the concept of a Community Center and/or a community center building e.g., not Town funds.
5. Develop an outdoor recreational facility plan that improves existing sites and programs and works to acquire new sites.
6. Establish Town and citizen committees who can develop an information publication that lists department responsibilities, natural resources, and recreational and cultural activities
7. Encourage community functions such as public farmers markets, community festivals, recreational competitions, and special-occasion celebrations.

## **Land Use, Open Space, Natural Resources**

### ***Priority II: Develop Programs and Processes to Preserve Lunenburg's Community Character***

#### ***Task:***

**Create Incentives for Preserving the Town's Character and Open Space.**

#### ***Objectives:***

1. Establish outreach and educational programs that enhance awareness of land use, open space, and natural resources.
2. Create a stewardship of governmental boards and commissions (Conservation Commission, Planning Board, Board of Selectmen), private/public partnerships, and general citizenry to manage open space.
3. Devise a system for connecting greenways and trails with other conservation and forestry land.
4. Encourage commercial/industrial development in areas already zoned for such development, and not create new commercial/industrial development areas until the build-out of existing areas is reached.
5. Encourage preservation of gateways and vistas that reflect the visual character of the Town's landscape (Zoning).

#### ***Action Plans: Rural Residential Planning***

1. Protect gateways to the Town by establishing landscaping requirements (through zoning) that reflect a rural residential community, and by placing "announcement" signs in appropriate entry locations.
2. Protect the rural appearance of the Town by developing and maintaining 'rural roads,' by encouraging small residential subdivisions and by protecting meadows through scenic easements acquired either by tax abatement or by gift.
3. Promote agriculture, open space and/or conservation through mandatory cluster development.
4. Foster a diversity of housing types including assisted living, accessory housing, and cluster development (See Zoning land-use site study).

5. Manage the size, number and style of signs (Zoning).
6. Set appropriate standards (Zoning) for hilltop structures.
7. Optimize the appearance of large open commercial spaces by requiring amenities such as fencing and landscaping (Zoning).
8. Clearly state the intent of each zoning bylaw written in the Town Zoning Bylaws.
9. Improve Town facilities through the completion and development of the *Town Center Plan* and *Space Needs Study*, and through school and recreation plans.
10. Implement the *Open Space Plan*, including a system of connecting greenways, trails and other conservation and forestry land.
11. Create a stewardship program that implements outreach and educational programs to promote awareness of open space needs and conservation values.

## **Economic Development and Fiscal Planning**

### ***Priority III: Create and Develop a Fiscal Policy***

#### ***Task 1:***

**Create and Develop a Mechanism to Formulate, Implement, and Manage a Town-wide Fiscal Policy.**

#### ***Objectives:***

1. Identify current and projected future revenues.
2. Identify current and projected future operating expenses.
3. Identify projects of significant magnitude, and determine the impact those projects will have on the Town over the long range (i.e. 5 – 10 – 20 years).
4. Change the method currently used to manage Town fiscal affairs.
5. Create policies and procedures to appropriately manage Town fiscal affairs.

#### ***Action Plans:***

##### ***A: Assess Town Financial Conditions, Develop Financial Policies, and Implement Financial Structures***

1. Create a coordinating sub-committee consisting of the present financial departments. (Including the Board of Selectmen, the Finance Committee, Treasurer, Assessors, Capital Planning Committee, Ad-Hoc Finance Committee etc.).
2. Seek a financial director.
3. Evaluate current spending.
4. Continue to study long-range projection of operating and capital expenses.
5. Project the Town's financial condition in order to relate expenditures to the ability to fund them.
6. Enhance the financial component of the Town report, incorporating above-named factors.
7. Empower the Capital Planning Committee to implement short and long range financial capital plans.



***B: Develop Town-wide Collaboration of Services***

Empower the Capital Planning Committee to create a process for collaboration of services.

- a. Prepare an assessment of possible service collaborations, including personnel, services, and purchasing.
- b. Implement a Town wide purchasing plan.

***Task 2:***

**Seek Alternative Sources for Funding**

***Objectives:***

1. Increase revenues by methods other than taxation.
2. Encourage the Alternative Funding Committee to seek funding that is based on needs assessments.

***Action Plan: Continue the Alternative Funding Committee***

1. Prepare a Town wide needs assessment.
2. Identify funding sources.
3. Review the benefits and drawbacks of each funding to determine the funding's appropriateness, with the Board of Selectmen, Finance Committee, Capital Planning Committee, and any other specific department involved.

***Task 3:***

**Plan for Economic Development In Industrial and Commercial Districts in order to broaden the Town's Tax Base.**

***Objective:***

Devise a procedure to attract appropriate commercial and industrial enterprises in order to secure more non-residential revenues.

***Action Plan: Develop an Economic Base to Augment The Tax Rate***

1. Create an Economic Development Committee consisting of seven members (with representation from the Planning Board, Board of Selectmen, Finance, and citizens at large).
  - a. Determine factors that foster a healthy business climate.
  - b. Determine sewers, constructed in accordance with the facility plan.
  - c. Review current performance standards for businesses and industry.
  - d. Consider tax incentives for start-up businesses.
2. Attract appropriate commercial and industrial enterprises to Lunenburg.

***Task 4:***

**Streamline Operating Procedures By Managing and Controlling Cost and Expenses of The Town.**

***Objective:***

Provide more services and/or maintain the present level services for less money. Promote town wide collaboration to "work smarter and spend wiser".

***Action Plan:***

1. Reduce the costs of existing and new services and facilities.
  - a. Reduce the cost of maintaining and staffing facilities that are similar to one-another by using service and storage to serve more than one department.
  - b. Examine with adjacent towns and cities ways to jointly purchase and/or provide goods and services.
2. Examine existing services to determine whether or not they continue to meet the needs of the Town's changing population. Remove, modify, or add programs as appropriate and affordable.
  - a. Evaluate library services and facilities to see whether or not they meet the needs of the computer literate, home businesses, and tele-workers.
  - b. Review school class structure in relation to current and future age distribution of school children to see if the current pattern makes best use of existing school buildings and resources.

## **Community Service, Housing and Facilities Infrastructure**

### ***Priority IV: Develop a Plan to Expand, Upgrade and Maintain Municipal Services and Facilities***

#### ***Task 1:***

**Plan for and Implement the Enhancement and Maintenance  
of Municipal Services.**

#### ***Objectives:***

1. Bring sewer systems to areas of town where needed.
2. Plan for the space needs of the municipal facilities.
3. Initiate a public transportation system within the community.
4. Develop a Town wide trash pickup service.

#### ***Action Plans:***

**Effectively Plan for Needed Services, studying Financing  
Possibilities.**

1. Promote community support of the sewer facility plan by an in-depth presentation, and encourage a dialogue of all aspects of the plan.
2. Complete the 1998 *Space Needs Study* (See the Action Plan of the *Recreation And Traffic* Chapter).
3. Prepare a needs assessment for the public transportation system, and make a cost assessment for its implementation.
4. Prepare a cost analysis for a Town wide trash pickup service and the effect the cost of such a service would have on the tax rate.

#### ***Task 2:***

**Create a Municipal Financial Development Plan.**

#### ***Objectives:***

1. Develop a financial structure to coordinate all spending and revenue.
2. Develop a cost-effective purchasing plan.
3. Promote economical spending.
4. Generate suitable commercial and industrial development, to balance tax revenues.
5. Promote alternative funding sources, especially through grant writing.

***Action Plan:***

*See Other Action Plans, which Address These Issues.*

***Task 3:***

**Provide a Variety of Housing in the Community.**

***Objectives:***

1. Provide assisted living and shared housing.
2. Provide an ability to create accessory housing.

***Action Plan:***

***Research and Investigate Methods to Provide Varied Housing.***

Form a committee empowered by the Planning Board (according to its duties) to investigate the following issues:

- a. Research *assisted living* programs in other communities, and determine the availability of state or federal aid for such programs.
- b. Research *shared housing* plans in other communities, and determine the availability of state and federal programs and monies.
- c. Review changes to the accessory bylaw that permit *shared family* housing in one building composed of two units.

***Task 4:***

**Further Develop the Concept of a Community Center.**

***Objectives:***

1. Create and maintain the Community Center concept, incorporating a format for multi-generational programs.
2. Search for suitable physical site for the Community Center.
3. Seek grants.
4. Devise a budget for the programs and the facility.

***Action Plan:***

***Support the Citizens' Organization and Its Working Sub-Committees.***

1. Supply any data needed by committees and sub-committees.
2. Encourage and provide help to committees so they may seek funds from grants, foundations, endowments and local funds.

**Task 5:**

**Improve the Town Road System.**

**Objectives:**

1. Broaden the plan for road improvements.
2. Conduct a needs assessment to determine safety concerns.
3. Determine the possibilities of increasing state funding.
4. Establish priorities for the road improvement plan.

**Action Plan:**

***Determine the Status of the Road System and Update the Road Improvement Plan.***

Initiate a *Study* with the Capital Planning Committee, Board Of Selectmen, and Director of Public Works that will provide the following information:

- a. An assessment of long-range road needs.
- b. A prioritized list of improvements based on conditions of safety and traffic flow.
- c. A plan that reflects all available funding for a prioritized road improvement plan and assigns dollars to each project.



## Land Use

### I. Introduction

The *Land Use* Chapter focuses on already existing natural and man-made development constraints, trends and pressures, and the Town's ability to absorb new development in a manner that will be consistent with its Vision, Goals, and Policies.

*Envision 2007*<sup>1</sup>, a vision for Lunenburg in the future, established the following *Land Use* priority:

***"Develop Programs And Processes To Preserve Lunenburg's Community Character."***

*Envision 2007* chose to group *Land Use* and *Open Space and Natural Resources* together. In the *Envision 2007* process, the following objectives were developed:

- Establish an awareness of land use, open space, and natural resources through outreach and educational programs
- Create a stewardship to manage open space, consisting of Town government boards and commissions, private/public partnerships, and general citizenry.
- Devise a system to connect greenways, trails, and other conservation and forestry land.
- Encourage commercial/industrial development in areas currently so zoned, and not impede development of these new areas until build-out. Their revenues will assist in funding Town programs.
- Encourage the preservation of Town gateways and vistas that will reflect the visual character of its landscape (zoning).

**Land Use Goals and Policies endorsed by the Planning Board include:**

- Preserving the rural and semi-rural characteristics of the Town.
- Protecting critical environmental areas.
- Maintaining the existing land use diversity within the Town.
- Focusing development where adequate infrastructure exists.
- Maintaining the existing land use density and intensity regulations, which relate to yards, land coverage and height.

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<sup>1</sup>The Vision is recorded on page one of the introduction. *Envision 2007* was developed in 1997 through a collaborative effort of Town citizens and members of several of its Boards and Committees.

- Enhancing the Town center to provide a greater 'sense of place'.

## Location

The Town of Lunenburg is located in north central Massachusetts, approximately forty-three (43) miles northwest of Boston and twenty-seven (27) miles north of Worcester, in northern Worcester County. Lunenburg is bordered by the city of Fitchburg and the Town of Ashby to the west; the city of Leominster and the Town of Lancaster to the south; and the Towns of Shirley to the east and Townsend to the north. [See **Map 1-1**, *Locus Map*.]

Lunenburg is approximately twenty-eight (28) square miles in size, of which approximately twenty-six (26) square miles is land and the remainder water. Two numbered highways serve the Town. They are Route 13 (Electric Avenue and Chase Road) and Route 2A (Massachusetts Avenue), which provide access to and from surrounding communities. Regional access is available from the superhighways Route 2 and Interstate 190, through Leominster and Fitchburg. These highways also connect Lunenburg with regional employment sites and shopping centers. There are over one hundred (100) miles of Town roads, and six (6) miles of State Route 2A in Lunenburg. [See **Map 2-1**, page 3: *Lunenburg Road/Street Map*.]

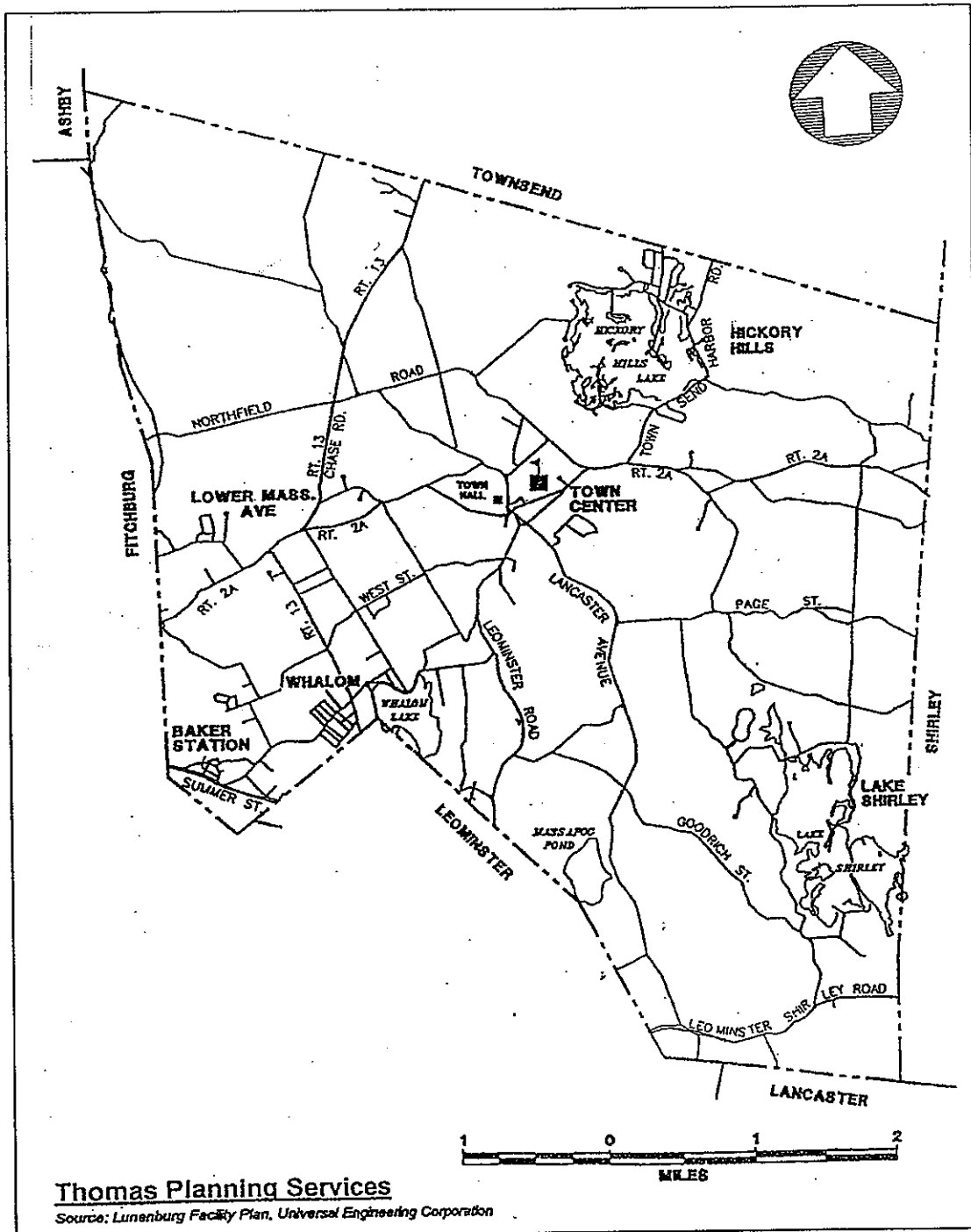
## General Character

Lunenburg has a semi-rural character, typified by single-family residences on primarily large lots. Major concentrations of residential development are in the Town Center, Whalom Lake, Lake Shirley, and the Hickory Hills Lake areas. Medium-density residential development, or dwellings on lots of less than one acre characterize many of these areas. The lake areas have a concentration of seasonal homes, the majority of which now have been converted to year-round housing. Newer subdivisions are generally small and are scattered throughout the Town, creating a sense of sprawl. Non-residential uses occur primarily in the southwest portion of Town in the Baker Station area, and along Massachusetts Avenue and Chase Road. These areas are along the major thoroughfares Route 2A and Route 13, and are typical convenience and highway-type uses such as automotive service and sales, department and variety stores, and restaurants. Industrial uses are limited to the southwest and southeast areas of Town, and represent a minor portion of the total land area. There are still a few active farms in Town.



## LUNENBURG ROAD/STREET MAP

Map 2-1



## II. Population Characteristics

The Town of Lunenburg has experienced steady but moderate population growth since World War II. This growth rate is partly because of improvements in the regional road system and the introduction of commuter rail service, allowing residents to travel to employment centers along Interstate 190 in Worcester and to areas in and around Boston via Interstates 495, 128, and 95.

The growth in number of housing units has been faster than population growth, since the number of persons per household is declining. In 2000, approximately 9,400 persons lived in approximately 3,668 dwelling units<sup>2</sup> shown in **Table 2-1 Population And Household Size**. Although the number of dwelling units increased each year, the number of occupants per household has decreased steadily since 1960, when the average household size was 3.52 persons. The average Town-wide density is 1.89 persons per acre.

### POPULATION AND HOUSEHOLD SIZE 1950 – 2000

Table 2-1

Year	Population	Increase in Population Over Previous Decade	Number of Dwelling Units	Household Size	Median Age
1950	3,906	77.9%	~	~	~
1960	6,334	62.1%	1,797	3.52	~
1970	7,419	17.1%	2,532	3.37	29.7
1980	8,405	13.3%	3,133	2.97	35.7
1990	9,117	8.5%	3,486	2.80	35.7
2000	9,401	3.12%	3,668	2.56 <sup>3</sup>	39.4 <sup>4</sup>

Source: U.S. Census Bureau, Lunenburg Growth Management Plan, and Building Department

<sup>2</sup> U.S. 2000 Census.

<sup>3</sup> 2.74 in owner occupied units; 2.13 in other units.

<sup>4</sup> U.S. 2000 Census.

The greatest concentration of Lunenburg's population is in areas surrounding Whalom Lake, Hickory Hills Lake, Lake Shirley and the Town center. These areas have been developed with lot sizes that are generally smaller than elsewhere in Town and have a concentration of older or seasonal homes. Many seasonal residences have been converted to year-round use.

Since 1990, the average number of new homes has been thirty-eight (38) units per year. [Table 2-2]

**Table 2-2**

<b>NEW HOUSING STARTS 1990 through 2000</b>	
<b>Year</b>	<b>New Dwelling Units</b>
1990	29
1991	29
1992	21
1993	34
1994	33
1995	51
1996	49
1997	37
1998	46
1999	58
2000	62

Although the intensity of the land use has changed greatly since the original 1961 *Master Plan*, the general land-use scheme has not. The most dramatic changes in land use since 1961 occur in amount of developed land versus undeveloped land.

**COMPARISON OF PLANNING FACTORS**  
1961, 1989, and 2000

Table 2-3

Factors	1961 Master Plan	1989 Growth Management Plan	2000 Town Figures <sup>5</sup>	1961 – 2000 Percent of Change
Population (persons)	6,334	9,000+/-	9,401	+ 47%
Persons per Household	3.52	2.97	2.66	-24%
Persons per Acre	2.80	1.97	1.89	-35%
Number of Households (dwelling units)	1,797	3,450+/-	3,676	+114.47%
Public School Population	1,432	1,595	1,706 <sup>6</sup>	+19.14%
Total Population Projected at Build-Out	28,500	26,641	22,318+/- (Figure is based on zoning changes)	+21.69%

<sup>5</sup> U.S. 2000 Census.

<sup>6</sup> This figure includes 55 non-resident high school students who come from the Town of Shirley and 102 "Lunenburg by choice" students.

### III. Physical Characteristics

The physical characteristics described on the following pages are extracted from previous studies prepared by *Thomas Planning Services* and *Universal Engineering Corporation*. The constraints for development imposed by these characteristics are shown on **Map 2-2** on the following page. See also the Chapter of *Open Space and Recreation and Natural, Cultural, and Historical Resources* of this Report.

The land in Lunenburg is predominantly hilly terrain, with most changes in elevation gradual. The majority of Town slopes west to east, with elevations ranging from a low of 300 feet above sea level in the east-central area to a high of 800 feet above sea level near the northeastern corner of Town. Relatively steep slopes are found in the central and southern portion of Town, between Whalom Pond and Lake Shirley. Wetland areas characterize low-lying areas located in the northeastern and central portions of the community.

Four large bodies of water exist in Town. These are Whalom Pond, Lake Shirley, Hickory Hills Lake, and Massapoag Pond. These water bodies exert a major influence over the surface drainage patterns. Topography is depicted on four 1988 United States Geological Survey (USGS) topographical quadrangle sheets.<sup>7</sup>

#### *Soils and Topography.*

The *Soils Map*, **Map 2-3**, page 12, illustrates the three main soil groupings in Lunenburg. The Hinckley-Merrimac-Windsor soils cover a large portion of the Town. According to the Soil Conservation Service soil survey, these soils formed in water-sorted deposits of glacial outwash. Hinckley soils are generally deep and level, and have rapid- to very rapid permeability. Merrimac soils are from level to moderately steep, and have moderate to rapid permeability. Windsor soils are generally sandy, range from nearly-level to moderately-steep, and have rapid- to very rapid permeability.

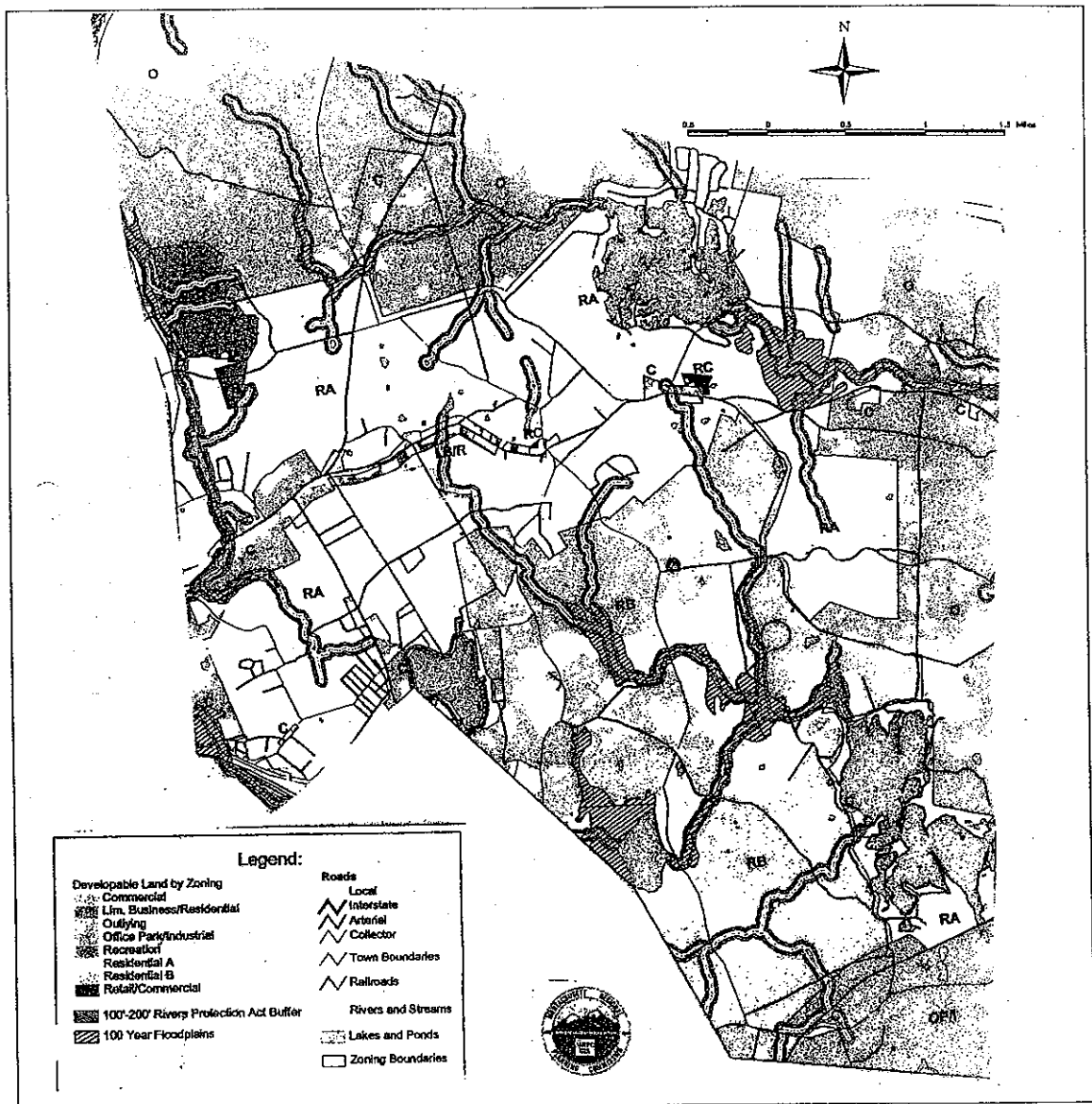
The Paxton-Woodbridge-Canton soil group is formed in glacial till and covers much of the central and northeastern parts of the Town. Paxton soils are gently sloping to steep, and have slow- to very slow permeability. Woodbridge soils are nearly level to sloping, and have slow to very slow permeability. Canton soils are gently sloping to steep, and have moderately rapid- to very rapid permeability.

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<sup>7</sup> The four 1988 United States Geological Survey (USGS) topographical quadrangle sheets are entitled "Ashburnham, Mass.-N.H."; "Ayer, Massachusetts"; "Fitchburg, Massachusetts", and "Townsend, Mass.-N.H.".

## DEVELOPABLE LANDS & PARTIAL CONSTRAINTS

Map 2-2



Like the previous soil grouping, the Chatfield-Hollis soil group is formed in glacial till. The grouping is found in two areas of Lunenburg—one located north of Hickory Hills Lake, and the other just north of Lake Shirley. The individual soils in the grouping both have moderate- to moderately rapid permeability. Chatfield soils are found on the lower slopes of ridges, and Hollis soils are found on the upper slopes. The soils in Lunenburg generally are poorly drained, and have slow percolation rates, limiting their suitability for on-site septic and drainage facilities, or they have high percolation rates and/or high groundwater, which limit the suitability for on-site septic and drainage facilities.

In an effort to prevent future ground and surface water pollution, the Montachusett Regional Planning Agency identified major landforms in terms of their capacities to “absorb on-lot disposal leachate and run-off from various residential development densities”, as well as their relationship to existing zoning, and the finally suggested re-zoning based on this analysis. The Town studied these issues further in the *1989 Growth Management Plan*, and has modified its zoning to deal with many of the issues identified in the report.

**Table 2-4** indicates the suitability for development without sewers according to soil type.

**LIMITATIONS FOR DEVELOPMENT  
WITHOUT SEWERS, BASED ON SOIL TYPE**

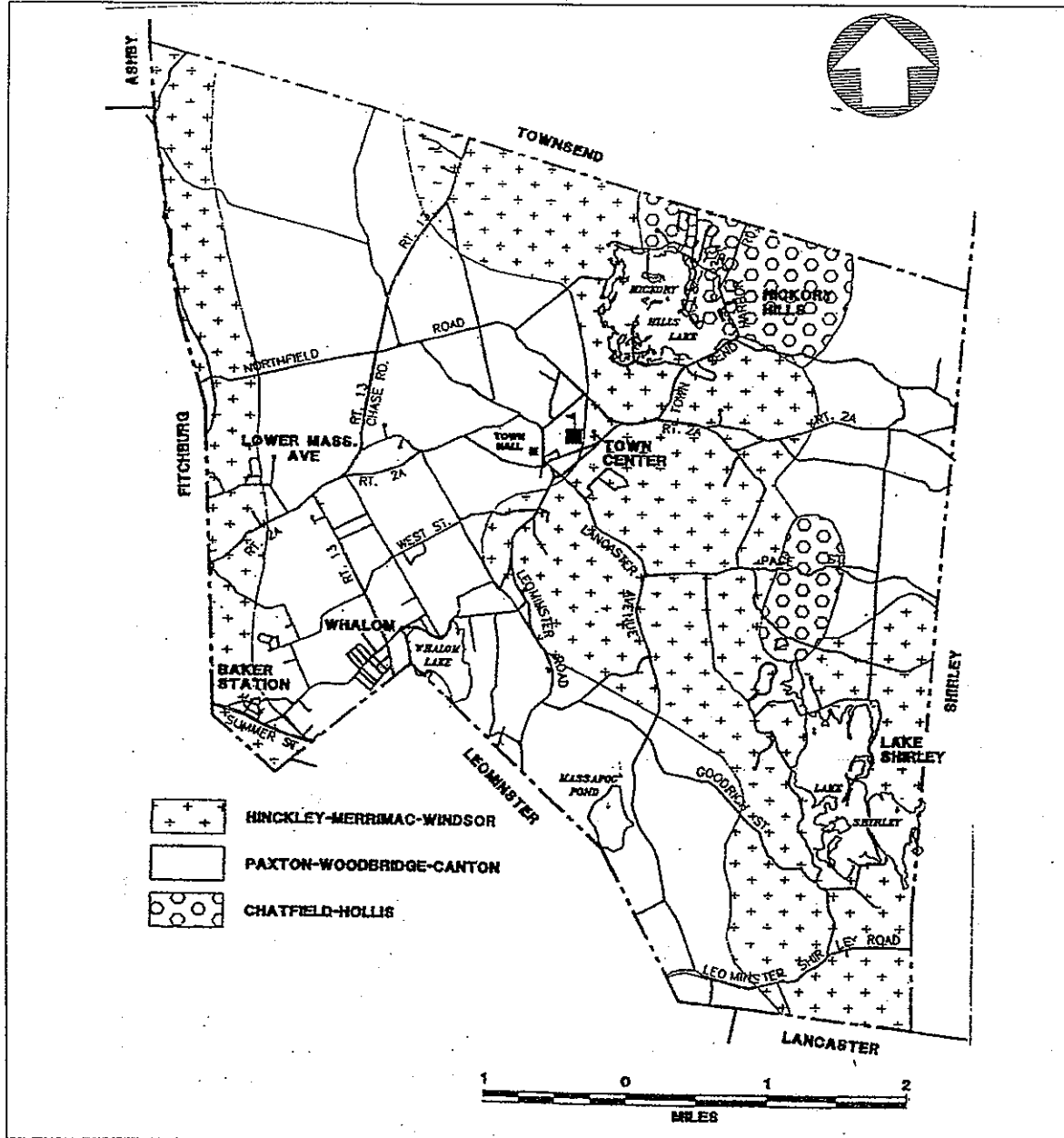
**Table 2-4**

Soil Type	Limitations for Residences	Limitations for Small Commercial Buildings
Canton	Slight to moderate	Moderate to severe
Chatfield	Severe	Severe
Hinckley	Slight to moderate	Moderate to severe
Hollis	Severe	Severe
Merrimac	Slight to severe	Moderate to severe
Paxton	Moderate to severe	Moderate to severe
Windsor	Slight to severe	Severe
Woodbridge	Moderate to severe	Moderate to severe

**NOTES:** The degree of severity relates to factors such as slope, seepage and depth to bedrock. Limitations relate to on-site sewage disposal, and foundation construction of roads and buildings.

## SOILS IN LUNENBURG

Map 2-3





The soil characteristics of Lunenburg are not conducive to dense urban development without considerable expenditure for infrastructure. Because of the limitations noted earlier in this section, small lots with on-site septic systems are not feasible.

### *Geology*

Lunenburg can generally be divided into two major geological units. The western half of the Town is characterized by sloping uplands, and is underlaid by non-stratified glacial material, primarily glacial till. This area of Town has numerous moraines, drumlins and bedrock uplands, and has soils consisting of silty, clayey sands and gravel containing cobblestones and boulders.

The eastern half of Lunenburg is more typically lowland, and is underlaid by stratified glacial drift. This area is composed of glacial outwash, and contains frequent ice-contact deposits, including glaciolacustrine deposits. These deposits are generally made up of fine sands, silts, and clays. A number of smaller isolated pockets of non-stratified material are distributed throughout.

### *Climatology*

The average normal temperatures in Lunenburg in January and July are, respectively, 23.4 and 71.3 degrees Fahrenheit. The average normal annual precipitation is measured at 47.6 inches. November is the wettest month (averaging 4.4 inches), and February is the driest (averaging 3.3 inches). Average annual snowfall is reported at 70.4 inches, with February receiving the greatest amount of snow, averaging 17.3 inches.

### *Hydrology*

There is a major unconfined aquifer running in a north-south direction on the eastern side of Lunenburg. This aquifer runs southerly from Hickory Hills Lake, in an irregular configuration, to the southern border of the Town. The area consists of deposits of sands and gravels with a saturated thickness of more than twenty (20) feet, and generally coincides with the lowlands running through the eastern side of Lunenburg.

All of the land within the Town of Lunenburg lies within the Nashua River Basin. The extreme western portion of the Town and the waters associated with it drain into the north branch of the Nashua River. The remaining portion

of the Town feeds directly to the Nashua River, which is a major tributary of the Merrimack River. Major brooks and tributaries in Lunenburg are subject to the recently enacted Rivers Protection Act, which limits building in a two-hundred (200) foot buffer zone. [See Map 2-4, page 15: *Hydrology Map*]

#### *North*

Surface drainage in the Nashua River watershed is limited primarily to stream flow along northwest-southeast ridgelines. The northern portion of Lunenburg drains into Hickory Hills Lake via several streams, with Mulpus Brook representing the major one. As Mulpus Brook continues, it provides the main source of drainage out of Hickory Hills Lake, passing through a large wetland area south of the lake before passing through the Town of Shirley and into the Nashua River.

#### *Central and South Central*

The central and south-central portions of Lunenburg drain into Lake Shirley, via a widely dispersed network of small- to medium sized brooks and extensive wetland areas. Lake Whalom and Massapoag Pond drain into Lake Shirley, thereby completing a minor drainage basin encompassing approximately fifty (50) percent of the Town's land area. This region connects to the Nashua River via a major tributary located within the Town of Shirley.

#### *West*

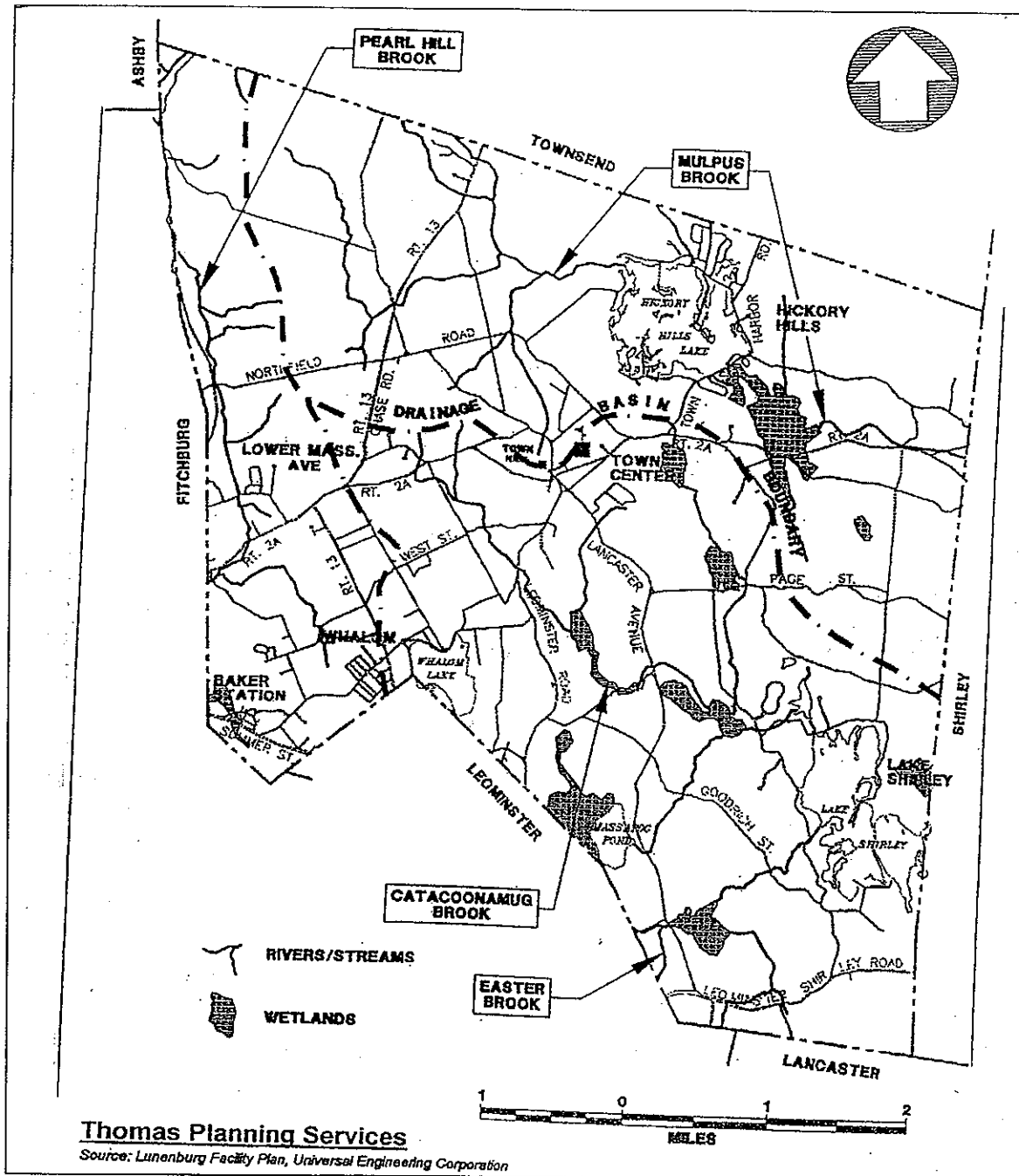
The western section of Lunenburg drains into the Pearl Hill Brook, representing a small portion of the drainage basin connected to the north branch of the Nashua River. The north-northwestern portions of the Whalom district are connected to this separate minor drainage basin via a smaller network of brooks and wetland areas feeding into the Pearl River Brook.

#### *Wetlands and Floodplains*

The major wetland areas of Lunenburg are located throughout the eastern half of the Town. They are identified with Mulpus Brook as it drains out of Hickory Hills Lake, and with major tributaries draining into Lake Shirley. These wetlands are valuable because they provide natural drainage, flood control, groundwater recharge, natural water purification, wild habitat, and opportunities for recreation. The Lunenburg Conservation Commission, as part of its authority under the *Wetlands Protection Act* and the Town of Lunenburg *Wetlands Protection Bylaw*, reviews development within wetland areas and issues mitigation measures for work within the wetlands or associated wetland resource areas.

## Hydrology in Lunenburg

Map 2-4



The 1981 *Federal Emergency Management Agency Flood Insurance Study* of the Lunenburg identified primary flood hazard areas in the Town. These areas included Baker Brook, Pearl Hill Brook, Mulpus Brook, Catacoonamug Brook, Lake Shirley, and Whalom Lake. Additional flood hazard zones have been identified for those areas surrounding the wetland and swamps. The majority of these areas occur in the east-central portions of the Town.

The Town has taken steps to protect life and property due to flooding by minimizing encroachment in the floodplain. To do this, they adopted a *Flood Plain District* as part of a Zoning Bylaw. The Town has limited the uses in the *Floodplain District* to low intensity, low impact uses, e.g., agriculture, and has prohibited encroachments in the District that would increase flood levels during the "once in a hundred years" flood. In addition, Lunenburg has adopted a *Water Supply Protection* Bylaw as part of the Zoning Bylaw. This bylaw serves to protect not only well sites and potential well sites, but also the aquifer in which the well sites are located and the drainage area in which the aquifer is located.

There are approximately 1,800 services to the approximately thirty-four (34) miles of water mains. The average daily water use for 1999 was approximately 230 gallons per day per household.<sup>8</sup>

### *Conservation Lands*

Lunenburg maintains several large parcels of forested/conservation land. The Town has taken steps to reduce loss of other forested land. A Zoning Bylaw includes a number of provisions to maintain as much of the land in its natural state as is feasible, and to preserve precious natural resources. These bylaw accommodations include providing for planned developments that encourage open space, a *Water Supply Protection District*, and a land coverage regulation which establishes the maximum percent of a lot that can be covered by impervious surfaces, buildings and other structures. Furthermore, subdivision regulations call for re-vegetation of cleared areas to prevent erosion, planting of street trees and the retention of the natural vegetation on the site wherever possible. Today, approximately 1,600 acres of land are designated as conservation land. Significant Town of Lunenburg conservation and other municipally or State-owned lands are shown in **Table 2-5** on the following page.

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<sup>8</sup> Office of the Planning Board, 10.19.2000.

**TOWN AND STATE OWNED LANDS OVER 5 ACRES**

**Table 2-5**

Owner/Type of Land	Location	Acreage
Town/Conservation Land:	N.W. Townsend Road	180.00
	Howard Street	15.00
	West Townsend Road	35.00
	Chase Road	267.39
	Townsend Harbor Road	44.50
	Northfield Road	20.00
	Mulpus Road	215.24
	Mulpus Road	66.50
	Chase Road	36.38
	Massachusetts Avenue	283.98
	Elmwood Road	24.25
	Leominster Road	9.04
	Burrage Street	74.00
	Reservoir Road	72.50
	Page Street	7.50
	Page Street	29.49
	Pleasant Street	78.84
	Lancaster Avenue	17.00
	Twin City Baptist	40.00
Other Municipal Land:	School Department - Mass. Ave.	45.66
	School Department - Chestnut Street	27.06
	School Department - West Street	66.57
	Cemetery Department - Holman Street	21.03
	Highway Department - Chase Road	7.85
	Housing Authority - White Street	6.50
	Lake Shirley	366.00
State Land:	Whalom Lake	99.00
	Townsend Road (Conservation)	127.48
<b>TOTAL</b>		<b>2283.76</b>

Source: Town of Lunenburg

Map 2-2 shows lands that have been described as having constraints for development.

## IV. Existing Land Use and Buildout

Major developed areas are concentrated along Route 2A, in the Town Center and in the lake areas. Residences are primarily along existing streets and in new subdivisions. Commercial uses are primarily at Whalom, Summer Street and on 2A. Industrial uses are primarily in the southern part of Town.

The major classifications of land use are shown on **Table 2-6**, along with the percentage of total land area in Town, the approximate number of acres zoned for each classification, the acres currently in use, acreage immediately available for further development, and undevelopable acreage. All figures are based on the Montachusett Regional Planning Commission 2001 Buildout Study.

### APPROXIMATE LAND USE IN LUNENBURG See also Table 2-1 on page 4 of this Element

Table 2-6

Land Classification	Percentage of Total Land Area in Town	Acres in Use	Potential on Land Suited for Development
Residential Land	91.58 %	3,463	4,206 Lots (5,045 Units)
Commercial Land	4.62 %	1.87	328 Acres
Industrial Land	3.78 %	42	596 Acres
<b>TOTALS:</b>	<b>99.98 %</b>	<b>3,692</b>	<b>4,930</b>

Source: Montachusett Regional Planning Commission, 2001.

Further detail is on file in the offices of the Board of Assessors and the Planning Board.

Under present zoning there are 3,463 acres of residential land and 331 acres of commercial and industrial land<sup>1</sup> available for development. This is an adequate amount of residential and commercial land for 2020, without making zoning changes and/or dividing existing lots. Additional industrial land is required or the Town will remain dependent on other communities for employment opportunities. At the present time, the greatest industrial development opportunity is in the area of the Office Park, and in one district in the southern part of Town. This opportunity is made possible by potential re-use of excavated areas and of lands owned by a gravel operator but not used for excavation.

Of the roughly 3,700 acres labeled available for development, one hundred and forty-eight (148) parcels contain fifteen (15) acres of land or more. Ninety (90) parcels contain at least twenty-five (25) acres. Because there is the opportunity to separate lots from those 'in use', it can be assumed that the 'acres available' can be increased substantially by further subdivision of existing lots. This is most apparent in the 'residential land, in use' category, which averages more than two and two-thirds (2-2/3+) acres per dwelling unit. Although some older homes are built on lots under one (1) acre in size; others are on larger lots, and some new homes are on lots that exceed the existing zoning.

#### PROJECTED LAND USE IN ACRES<sup>1</sup>

Table 2-7

Land Use Category	Current Use	Additional Additional Use At Build-Out
Residence	3,676 units, 3,463 acres	5,045 units
Commercial And Industrial	229 acres	331 acres

<sup>1</sup> Montachusett Regional Planning Commission Buildout study, 2001.

Major changes in land use in the last decade include new residential development at Lunenburg Crossing, Blueberry Hill, Easterbrook, Longwood, and Flat Hill. They are accounted for in the **Table 2-7** on page 19, and in the build-out analysis.

There are a number of large residential development plans that have been presented to the Planning Board, which have not been carried through to the definitive stage. If these were all to be approved, they would amount to approximately half of the growth projected for the next twenty (20) years. In addition, a number of non-residential development proposals have been presented that could impact commercial growth, particularly along the sewer area of Route 2A.

### PRESENT LAND USE CONTROLS

Lunenburg is presently divided into eight (8) zoning districts, shown on the 1996 Zoning Map. **Table 2-8** below summarizes Lunenburg's present land use controls by zoning district, including the principal uses allowed and the minimum lot area for each. [See **Map 2-5**, page 22: *Zoning Map*.]

The Planning Board reviews zoning regularly, and new needs are regularly met (such as zoning provisions for cellular towers). Innovative provisions have been adopted. As noted earlier, the zoning also includes a *Water Supply Protection District* and a *Flood Plain District*, both of which are overlay districts. The Town allows planned development. One type of zoning for development has a set-aside provision for affordable housing. In addition, a Route 2A Overlay District has been established, to provide general guidelines for non-residential design along this major access Route in Town. [See **Zoning Map 2-5**]

Developable land by zoning district is the basis for the build-out calculation made by MRPC. "Build-out" is a determination of the number of units if all available zoned land is used.



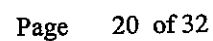
## Land Use Controls By Zoning District

Table 2-8

Zoning District	Principal Uses Allowed	Minimum Lot Area
Residence A	Single and multi-family residential; agricultural, non-commercial livestock	40,000 square feet
Residence B	Same as Residence A	80,000 square feet
Outlying District	Same as Residence A	40,000 square feet
Limited Business/ Residential	One and two family residential, bed and breakfast, arts and crafts, retail sales, agricultural, service or repair shops	40,000 square feet
Commercial	Commercial, automobile sales and service	10,000 square feet
Retail Commercial	Retail sales and services and light manufacturing	10,000 square feet
Office Park and Industrial	Office, research, light industry	5 acres
Recreation	Passive and active recreation	2 acres

Source: Town of Lunenburg Zoning Bylaw

### Map 2-5



## V. Land Use Issues

The Town of Lunenburg has long recognized the benefits of a continuing process of public planning in order to identify important land use issues, and has undertaken such a process to improve the quality of life and maintain the character of the Town as a whole. As early as 1961, the Planning Board was responsible for the development of a *Master Plan* known as "*The Benjamin Report*". This plan, updated several times, has served the Town well.

### A. Planning with Sewers

Past studies of Lunenburg were almost all based on a Town without sewers. Within the past ten (10) years, Lunenburg has completed the *Growth Management Plan* and *Strategic Plan* (1989), the *Open Space Plan* (1992), the *Master Plan Status Report* (1993), the *Sewer Impact Study of the Southwest Section* (1995), the *Municipal Space Needs Plan* (1996), and the *Facilities Plan* (1997) that evaluated the wastewater management needs of the Town over a twenty (20) year planning period.

### B. Residential Tax Return

The property tax rate in 2001 was \$15.60, a decrease over the previous five years. This rate is affected heavily by costs associated with residential land uses, especially school costs. If it is necessary for the Town to increase services or pay more for its existing level of service, it must either increase the number and value of non-residential uses or increase the tax rate. The future land use plan reflects this issue. Almost eighty-nine percent (89%) of the tax levy is on residential property and most of the receipts are allocated to schools (over nine million dollars, almost equal to the total amount raised by the property tax, indicating the need for grants and other revenue sources).

### C. Industrial/Commercial Development

*See Economic Development Element*

### D. Town Center Development

The *Town Center Alternatives and Municipal Space Needs Options Report*, dated July 17, 1998, addresses current and potential problems in the Town Center that are the result of growth. This report makes specific suggestions, including consolidation of Town Offices at a new site, expansion of the Library, and relocation of the Fire, Police, Emergency and Dispatch services in a Public Safety Building. These proposals are designed to enhance Lunenburg's sense of community, allow for a better delivery of Town services, and provide adequate land serving the growing Lunenburg population (see *Community Facilities and Services Element*).

*Land Use Element**Environment and Resource Protection*

(See *Natural and Cultural Resources* and *Open Space and Recreation Elements*)

*Housing (See Housing Element)**Sprawl*

Lunenburg's subdivisions are scattered throughout the Town and are not connected to each other or to the Town Center. This has been a planning objective because it integrates new development with the established development.

**Population and Housing Projections**

The Montachusett Regional Planning Commission estimates the population at buildout to 22,318 persons. See Buildout Statistics on page 24. Details of the Montachusett Regional Planning Commission study including the following maps used in this study are on file with the Planning Board:

Map 1 Developed Lands and Absolute Constraints

Map 2 Developed Lands and Partial Constraints

Map 3 Composite Map

Map 4 Orthophoto Base Map

Reduction of these maps appear in the appendix to this report.

Earlier population projections estimated Lunenburg's population into the year 2025. These studies projected a faster growth than is actually occurring, and reaching them by the dates indicated is not anticipated. The MISER projections do not go past 2010, and appear to be on target. The Montachusett Regional Planning Commission (MRPC) in 1979 predicted a population for the Town of over 10,000 in 2000. In 1900, the US Census Bureau reported Lunenburg's population<sup>2</sup> to be 9,117, living in 3661 dwelling units. In 2000 it was reported as 9,679.

### PREVIOUS POPULATION PROJECTIONS FOR LUNENBURG

Table 2-9

Forecasting Organization	Projected for Year:		
	2000	2010	2025
Morgenroth & Associates, Inc. (1973) <sup>3</sup>	14,000		19,000
Montachusett Regional Planning Commission (1979)	10,044		
Massachusetts Institute of Social and Economic Research (M.I.S.E.R.) (1994)	10,336	11,090	

<sup>2</sup> U.S. 2000 Census Bureau

<sup>3</sup> Population projection was made in conjunction with the *Interim Report on a Proposed Sewerage System and Sewage Treatment Facilities*.

## Build-Out Analysis

The "build-out analysis" estimates the Town's capacity for future development under current zoning regulations. "Build-out" estimates the maximum growth possible under existing conditions and regulations. "Build-out" is a theoretical figure, based on the land that could be developed under existing zoning. It is used to anticipate changes in land use, population, and services needs. It will probably never be reached, because individuals will keep land out of development, open space will be preserved, additional land use regulations may be adopted, and other unforeseen conditions will develop.

Various buildout studies have been done by the Town in the past. The most recent was done as part of the Massachusetts GIS study in 1999 – 2000.

### LUNENBURG BUILDOUT STATISTICS<sup>2</sup>

Table 2-10

Impact	Total
Additional Residents	12,917
Additional School Children	2,422
Additional Dwelling Units	5,045
Additional Developable Land Area (sq. ft.)	289,418,383
Additional Developable Land Area (acres)	6,644
Additional Commercial/Industrial Buildable Floor Area (sq. ft.)	14,435,585
Additional Water Demand (gallons/day)	2,051,446
<i>Residential Water Use (gallons/day)</i>	<i>968,777</i>
<i>Comm./Ind. Water Use (gallons/day)</i>	<i>1,082,669</i>
Additional Municipal Solid Waste (tons/year)	5,989
<i>Non-Recycled Solid Waste (tons/year)</i>	<i>4,712</i>
<i>Recyclable Solid Waste (tons/year)</i>	<i>1,277</i>
New Roads (miles)	48.85

Notes:

1. "Residents" at buildout is based on 2.56 persons/household (2000 average)
2. "School Children" at buildout is based on 0.48 students/household (2000 average)
3. "Developable Land Area" takes into account partial constraints.
4. "Residential Water Use" is based on 75 gallons per person per day.
5. "Comm./Ind. Water Use" is based on 75 gallons per 1,000 square feet of floor space.
6. All solid waste estimates are for residential use only.
7. "Non-Recycled Solid Waste" is based on .3648 tons per person per year.
8. "Recyclable Solid Waste" is based on .1482 tons per person per year.
9. "New Roads" takes into account houselots on both sides of the road.

<sup>2</sup> Montachusett Regional Planning Commission, 2001

## VI. Future Land Use Plan

With the exception of an increase in commercial development that is anticipated along Route 2A (Massachusetts Avenue) in the area between the Town Center and west to the Fitchburg City line, no dramatic change in land use patterns are anticipated during the next several decades, unless the Town modifies its development controls, adds substantially to the sewered area, or there is a major change in transportation networks.

### Open Space

Open space, in the form of conservation and recreation land, constitutes approximately nine (9%) percent of all land in Lunenburg. The *Open Space Plan* of the Town recommends that buffers of open space be expanded along the northern edge of Town. [See **Map 2-6, Future Land Use**]. Industrial development, currently clustered in the southeastern and southwester corners of Town, can increase moderately in density in the southwest direction only.

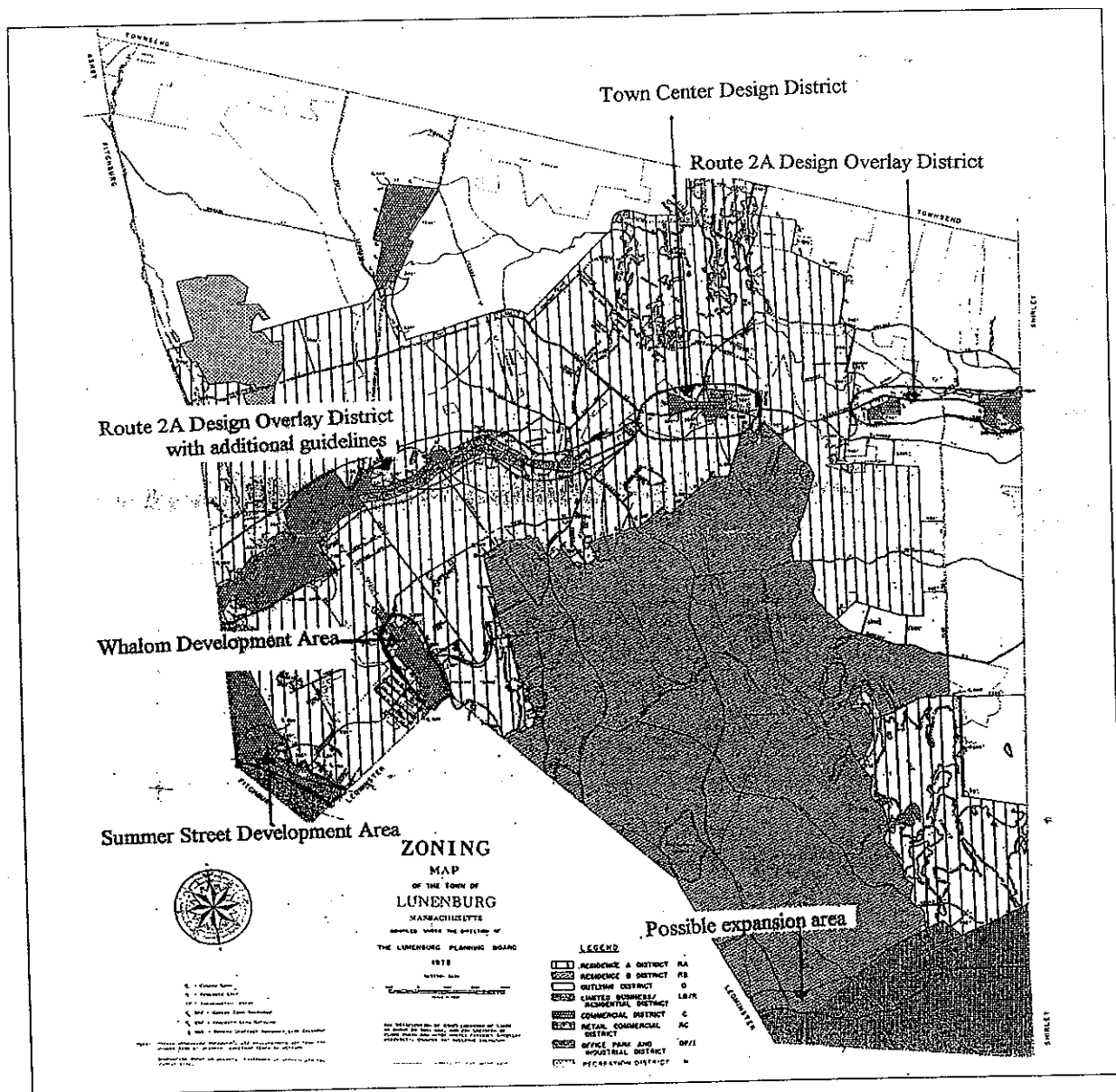
### Residential

Most future residential development of any substantial nature is likely to occur in parts of Town with sewers or which will have sewers in the future. Development in unsewered areas will likely continue at the present low-density rate. An approximate total of between nine hundred and eleven hundred (900–1,100) additional dwelling units can be projected by the year 2020. In addition, some assisted living units or continuing-care residences are expected, especially in sewered areas, to accommodate an aging population.

The appearance and development design of some older residential areas will deteriorate without positive steps taken by the Town. Appropriate guidelines will improve the quality of development, and measures such as tax relief for seniors and code enforcement will stabilize housing quality.

# FUTURE LAND USE MAP

Map 2-6





## Recommendations

In order to meet the objectives of *Envision 2007* and the *Land Use Goals and Policies* established to foster sustainable desired land use, the following recommendations are suggested:<sup>3</sup>

1. Actions that should be taken to preserve the *character of the Town* (listed as the first priority under *Envision 2007*):

Protect the rural appearance of the Town, by developing rural roads, protecting meadows, water bodies, vistas, and hilltops.

Amend Subdivision Regulations to provide standards for rural roads in very low-density developments, and by establishing guidelines to define and protect vistas, hilltops, meadows, and other desirable features of the landscape.

- Map all areas within the *Rivers Protection Act* and other sensitive areas desired for protection, and enforce the protective provisions of the *River Protection Act* and local Bylaws and regulations.
- Increase setbacks in the Outlying Area to project a more rural appearance.
- Acquire open space along the northern boundaries of the Town, to connect existing open spaces. (See *Open Space Plan*)
- Encourage cluster development on all parcels, not just those over twenty-five acres, as required by the present Bylaw, and provide incentives, e.g., allowing an increase in the number of units in exchange for a percent of units designated for the elderly or as starter homes.
- Consider encouraging agriculture by having a reduced tax rate for open land.
- Encourage a diversity of housing types. (See *Housing Element*)
- Discourage building on hilltops through use of environmental guidelines and the *Open Space and Recreation Plan*
- Adopt design guidelines for large commercial uses, including such requirements as fencing.

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<sup>3</sup> Further detail is included in the *Implementation Section*.

**2. The Town should manage and monitor the rate of growth by:**

- Administering the Phased Growth Zoning Bylaw. Consideration can be given to modifying these regulations, in order to encourage starter homes.
- Offsetting some of the education costs resulting from population growth by increasing appropriate non-residential tax revenues. (See *Economic Development Element*)

**3. The Town should reinforce its sense of place by:**

- Using design guidelines to develop a Town Center Plan to reinforce the Village character, e.g., provide a service center, reduced setbacks, distinctive landscaping and signage. [See *Municipal Space Needs Study and Municipal Facilities and Services Chapter*.]
- Developing design guidelines for Route 2A and the industrial areas, including appropriate landscaping, buffers and fencing of outdoor storage.
- Landscaping the 'gateways' to the Town to project the Town's identity.
- Preparing and implementing an improvement plan for the Whalom area (one of the 'gateways' to the Town, and the major Town attraction for non-residents) including landscaped parking areas, signage, and sidewalks.
- Controlling the size and style of signs. (See Implementation)
- Increasing lot sizes in the Outlying District, compatible with those in the *Residence B District*. This was considered but not endorsed by the Planning Board because the Board believed a change would be unfair to land owners and developers, whose expectations are based on present lot sizes.
- Integrating new subdivisions into the fabric of the community, by creating rural sidewalks, walkways, and trails.

**4. Other:**

Monitor the need for commercial growth and expansion along Route 13 (Chase Road and Electric Avenue).

## Implementation Actions

### Zoning Amendments:

- Increase setback requirements in the Outlying District.
- Provide incentives for construction of senior housing and for starter housing. (See *Housing Element*)
- Revise 'accessory apartments' provisions in order to assist seniors. (See *Housing Element*)
- Provide incentives for 'continuous care', and 'assisted living' projects of appropriate size for the Town. (See *Housing Element*)
- Review the Sewer Facility Plan, and, if necessary, adjust districts for compatibility with the areas receiving sewer service.
- Adopt additional design guidelines for Route 2A, commercial and industrial areas, the Town Center, and the Whalom area.
- Adopt guidelines to preserve hilltops, meadows, and vistas.
- When sewers are extended to the Town Center, consider Transfer of Development Rights from outlying areas to sewerred areas.

### Subdivision Regulations:

- Adopt design guidelines for developments built along rural roads.
- Provide incentives for open spaces that will connect those open spaces that already exist.
- Adopt guidelines to preserve hilltops, meadows and vistas.

### Other:

- Improve the inspection process to allow greater time for enforcement of all development regulations, guidelines and sign regulations, or create a full-time Zoning Enforcement Officer position to assist the Inspector of Buildings.
- Prepare a walkway plan to connect various sections of the Town.
- Prepare land use and development plans for the Whalom Area, which is a major gateway to Town.
- Prepare and conduct an outreach and awareness program of land use issues.

*Land Use Element*

- Reinforce the Zoning Bylaw by adding a clear set of purposes for each district.
- Improve Town Facilities (See *Municipal Space Needs Study, Phase I*).
- Map all lands that are subject to the *Rivers Protection Act*.
- Enforce all environmental regulations, including the *Rivers Protection Act*.

## LAND USE RECOMMENDATIONS

Table 2-11

RECOMMENDATIONS	PHASE			JUSTIFICATIONS
	One	Two	Three	
Develop Town Center Plan	See <i>Community Facilities and Services</i> Chapter			
Reinforce Sense of Place by developing a Center Plan, Signage, and Public Facilities	•	•		Improves character and appearance of the Town; increased convenience.
Landscape the gateways to Town	•			Improves appearance of Town.
Control size and styles of signs	•	•	•	Improves appearance of Town.
Increase Setback in outlying areas	•			Maintains rural atmosphere.
Monitor rate of growth	•			Aids planning by predicting services needed
Increase non-residential tax revenue by adopting measures to improve the quality of business and industrial areas.		•		Improves the fiscal base of the Town.
Expand and adopt design guidelines for commercial uses; Route 2A, Town Center, and the Whalom Area	•			Improves appearance and improves tax base.
Encourage cluster development	•			Protects natural resources.
Develop guidelines for the identification of rural roads	•			Maintains rural atmosphere.
Augment the land use enforcement process	•			Maintains land value.
Prepare outreach program through "Simplified Permitting" procedure and media presentations		•		Aids administration.
Map areas subject to Rivers Protection Act	•			Aids administration.
Establish purpose for zoning districts	•			Assists enforcement.

RECOMMENDATIONS	PHASE			JUSTIFICATIONS
	One	Two	Three	
Adjust zoning according to recommendations from the Sewer Plan	•			Promotes efficient use of land.
Establish guidelines to protect meadow, water bodies, vistas, and hilltops	•			Protects natural resources.
Discourage use of abrasive styles and appearances	•			Protects property value.
Enforce environmental regulations	•	•	•	Protects natural environment.

## HOUSING

**GOAL:** To provide appropriate housing for Residents of the Town of Lunenburg

**Policy:** Encourage development of housing units for a variety of age and income groups.  
Encourage a diversity of housing types.

### Introduction

Housing for the population of the present and the anticipated future population of Lunenburg has been examined in various studies throughout the last ten (10) years. These studies include

*Growth Management Plan*, Thomas Planning Services, Boston, 1989  
*Innovative Housing Plan*, Lunenburg Innovative Housing Committee, 1991  
*Strategies Plan*, Thomas Planning Services, Boston, 1989  
*Sewer Impact Study*, Thomas Planning Services, Boston, 1995  
*Draft Wastewater Facilities Plan*, Universal Engineering Corporation,  
Boston, 1997

The studies do not repeat each other, but they do incorporate each other where appropriate. When information from these studies is included in this Master Plan Element, table numbers have been changed in order to appear consecutively, and references have been changed where needed.

In each decade since World War II the population of Lunenburg has grown, from 3,900 in 1950 to over 9,400 today. [See also *Land Use Element*]

Although the population has increased, the rate of this growth is decreasing. The median age of population in Lunenburg has increased, partly as a result of families raising fewer children and partly because of an overall increase of life span.

Although the number of dwelling units in Town has increased each year, the number of occupants per household has decreased dramatically since 1960, when the average household size was 3.52 persons. In 2000, the average household size was 2.56 persons.

## Background

### Population Projection

The population total as well as the composition of the population directly affects the housing needs of the future. In some past studies that include a projection of population for the Town of Lunenburg, the projection has been for a finite period (that is, 10 to 20 years). Others have projected the full "build-out" population, which is defined as the maximum population attainable based upon zoning and other constraints to development.

In the *Draft Wastewater Facilities Plan*<sup>1</sup>, the year 1997 was used as the base year, and land use conditions and population were then projected for a planning period of 20 years, until 2017.

Development of sewers will encourage population growth<sup>2</sup>. To project population, the *Draft Wastewater Facilities Plan* cites a growth rate of fifty (50) new homes per year. On this basis, the 2020 population would project to be 12,325 persons.

These projections are summarized in Table 3-1.

### Previous Population Projections and Buildout Counts

Table 3-1

Forecasting Organization	Projected for Year:				
	1990	1994	2000	2025	Build-Out
Benjamin Master Plan (1961)					28,500
Thomas Planning Services Growth Management Plan (1989)					27,000
Morgenroth & Associates, Inc. (1973)			14,000	19,000	
Montachusett Regional Planning Commission (1979)			10,044		22,318 <sup>3</sup>
Town of Lunenburg Census (1990 and 1994)	8,685	8,775			
U.S. Census Bureau (1990)	9,117				

<sup>1</sup> *Draft Wastewater Facilities Plan*, Universal Engineering Corporation, Boston, 1995

<sup>2</sup> *Sewer Impact Study of the Southwest Corridor of the Town of Lunenburg*, Thomas Planning Services, June 6, 1995

<sup>3</sup> 2001 study, not in 1979 study



As indicated in **Table 3-1**, The 1961 *Master Plan* (Benjamin) projected a build-out population, without sewers, of 28,500, based upon 8,000 homes. The study noted the need to provide sewerage facilities in the Baker Station and Whalom areas. In 1989, Thomas Planning Services, Inc. prepared *The Growth Management Plan*, in which they projected a build-out population (without sewers) of 27,000, in 10,800 households. These build-out projections are approximately the same as those in the 1961 *Master Plan*, and are still thought to be on target. The Thomas Planning Services study reflects the decrease of persons per household to 2.5. Build-out projections, although also estimated without sewers, will not change even with sewers factored in, unless residential zoning is changed. The effects of including sewers will only accelerate growth.

In 1973, Morgenroth and Associates, Inc., in conjunction with the *Interim Report on a Proposed Sewerage System and Sewage Treatment Facilities*, also projected Lunenburg's population into the year 2025. These projections exceed subsequent ones, [shown in **Table 3-1**], and are not anticipated to be reached by the dates indicated. The *Montachusett Regional Planning Commission* (MRPC) prepared population projections for the Town of Lunenburg of 10,044 for 2000. The actual Population was 9,401 according to the U.S. Census. MRPC now predicts a population of 22,318 at buildout.

For the purposes of this Report, population projections have been based upon housing growth and size of household (persons per house). As noted<sup>4</sup>, housing growth has averaged 40 new homes per year in Lunenburg during the 1990's. However, the rate of new homes per year accelerated with sewerage in 1999 and 2000. Element 5 of the *Draft Wastewater Facilities Plan* proposes alternatives for meeting wastewater needs in Lunenburg based upon sewerage the needed areas. Thus, a population projection for this Report will assume extension of sewers.

### Size of Household

Size of household has been a downward trend, from 3.52 persons per house in 1960 to 2.56 in 2000. Maintaining even the 2000 average household over the next two decades is unlikely, since the population trend per family is still downward. The decrease in household size is expected to continue, and is typical of towns in Massachusetts.

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<sup>4</sup> *ibid.*

Lunenburg population projections are presented in **Table 3-2**. Population is projected through the year 2020, based upon a range of 35 to 50 new homes per year, using household sizes discussed earlier.

### Projected Population Growth of Lunenburg

Table 3-2

Number of Dwelling Units			Household Size	Projected Population	
Year	35 per year	50 per year		35 per year	50 per year
2000	3,668	3,668	2.56		
2005	3,843	3,918	2.50	9,607	9,705
2010	4,018	4,168	2.50	10,045	10,428
2015	4,193	4,418	2.50	10,482	11,045
2020	4,368	4,668	2.50	10,920	11,670

As stated earlier, sewer development stimulates population growth. This Report will employ a growth rate of 50 new homes per year for projecting population. Based on this, **Table 3-2** shows a year 2020 projected population of 11,670 persons, the figure of buildout projected in the Montachusett Regional Planning Commission study.

## Housing Needs

It is expected that new housing units will meet the market price requirements for family homes; however, there are other needs that also must be met. These are to:

- Make available units appropriate for single occupancy, 'starter' families, and Town employees.
- Make available over-55 and Senior housing, to meet needs of an aging population.
- Maintain housing and housing values through appropriate services and programs. [See *Municipal Services* Element]

Lunenburg has already taken some major steps to meet these housing needs, by adopting zoning for Accessory Apartments and by offering incentives for affordable housing in Planned Residential Areas. The Planning Board is reviewing the regulations for construction of Assisted Living units.

### A. Moderate Income and Affordable Housing

To qualify as appropriate or affordable housing under Massachusetts General Laws Chapter 40B, there are imposed limits. Impediments to providing affordable housing by the private sector include limited land available in sewered areas, land costs, and zoning. Lunenburg does not wish to reduce lot sizes or to extend sewers throughout the Town; therefore, the Town must examine incentives and subsidy programs to provide moderate income and affordable housing. See previous housing studies, as well as **Table 3-5**, entitled 'Selected Housing Strategies', on page 17 of this Element. The strategies listed there do not include any that are used by large cities, or any urban or inner city measures such as linkage.

#### *Chapter 40B*

The Town is vulnerable to applications under *Chapter 40B* of the Massachusetts General Laws, enacted to encourage development of "affordable" housing in all communities in the Commonwealth. *Affordable Housing*, as defined by the Commonwealth, is to be made available for persons of low and moderate-income levels, whose income is below eighty percent (80%) of the regional median household income of a family of up to four (4) persons. According to the Department of Housing and Community Development, regional household income for the fiscal year 1999 is \$52,600 (Worcester County non-metropolitan area). The 1998 median income in Lunenburg was \$48,826. The Chapter 40B Act establishes that a ten percent (10%) threshold of housing stock be made affordable for low or moderate-income households. If this threshold is not met, a developer may seek

waivers from local laws and regulations in order to create such housing. For Lunenburg, this threshold would number 395 affordable housing units, based on ten percent (10%) of the 3,950 housing units (an approximate 1999 number). Because only fifty-four (54) units currently qualify as affordable under the State definition, an additional three hundred and forty-one units are required to meet this threshold. It is clear that smaller communities, including Lunenburg, are having difficulty meeting the Commonwealth's goal of affordable housing under Chapter 40B.

A variety of housing affordability options, however, is considered in this Master Plan. A Massachusetts program that facilitates "affordable" housing is the *Local Initiative Plan* (LIP), which encourages Towns to cooperate with developers to provide such housing. The LIP provides communities with flexibility to provide low and moderate income housing options through zoning adjustments or incentives, or through the Comprehensive Permit provided for in Massachusetts General Laws *Chapter 40B*. In this case, assistance to public officials or to housing developers provided by the Commonwealth qualifies as a subsidy. A single-family house or any other housing unit built to qualify as "affordable" under State guidelines must be constructed with the same materials and have the appearance as all other housing units in the same development.

In addition, in January 2000, the governor signed *Executive Order 418*, which encourages towns to plan for new housing opportunities. To improve housing opportunities further, Executive Order 418 states that plans shall include, among other things, where the community will create new housing opportunities, where it will target commercial or industrial economic development (if any), how it will improve its transportation infrastructure (or how existing infrastructure will handle growth), and where and how it will preserve open space.

## **B. Community Preservation Act**

The Community Preservation Act authorizes towns to adopt a property tax surcharge and use the proceeds to acquire open space, acquire/develop recreation facilities, provide affordable housing and undertake historic preservation efforts. The Act provides that a minimum of ten percent (10%) of the funds realized be used for open space, affordable housing and historic preservation. The balance can be used for any of the four programs. There are also matching funds available from the State for municipalities that adopt the Act.

### **C. Senior Housing**

Seniors are the most rapidly growing segment of the population, and will become a major sector of the population that will only increase as "baby boomers", all now over age fifty, approach retirement age. In order to keep this demographic group in Town, an increase in housing options for Seniors, other than single-family homes, is necessary. It is important to provide Seniors with housing and services that assure them a comfortable, secure, and safe life style. Seniors are often the most cost-effective members of a community because they have no associated school costs. The majority of Lunenburg's current municipal budget is devoted to families with children and their related costs. Retaining Seniors is a vital resource to help meet these expenses.

Elder citizens can be expected to have difficulty remaining in Town after they become less mobile, or when their incomes are reduced. Because transportation and commercial services that are often located in concentrated areas are currently limited in Lunenburg, Seniors may choose smaller, more central housing communities where they can retain companionship and independence along with services at an accustomed level. [See *Economic Development Element*.]

Housing opportunities, other than single-family homes, available to Seniors in Lunenburg is limited to the fifty-four (54) public housing units administered by the Housing Authority, one mobile home park, and rest homes or nursing homes in adjacent communities. Although zoning that allows them is in place, there are no accessory apartments, over-fifty-five, congregate, assisted-living or continuing care housing options for Seniors in Town. The Town does have a modest tax relief plan for senior citizens who own their own homes.

### **D. Appropriate Housing for Singles, 'Starter Families', and Town Employees**

Affordable housing for single people, for Town employees, and starter houses for young families is limited in Lunenburg. Zoning allows for housing developments with needed residential uses, e.g., one- and two-family townhouses. As sewers are extended, there may be a desire for infill projects such as to town houses and garden apartments. The Planning Board has this issue under review. See Table 3-5.

## E. Town Houses and Garden Apartments

Continue the review for town house and garden apartments.

### *Mitigating measures for town houses and garden apartments*

In addition to achieving the Housing Goal as written in the introductory page of this Element, consideration needs to be given to the Goal of preserving the rural and semi-rural characteristics of the Town<sup>5</sup>. Should the Town decide to permit multi-family dwellings, it can enact a number of guidelines and/or restrictions to assure that this housing is consistent with Town Goals and to mitigate the disadvantages noted on page 10.

### *Mitigating measures include, but are not limited to:*

- Limiting the number of units in any structure and in any development
- Limiting the size of buildings and the number of attached units
- Limiting the density of buildings
- Determining landscaping requirements and limiting surface coverage
- Fencing, buffering and shielding parking areas, storage, and adjacent properties
- Increasing set-backs to preserve appearance of the area in which they are located
- Limiting the number of home occupations in a unit or building
- Making maintenance agreements
- Having design requirements
- Creating 'set-asides' for limited income or elderly
- Selecting siting that is not disruptive to the area's appearance or to already established single-family areas
- Selecting siting that is not disturbed by heavy traffic or incompatible non-residential uses
- Requiring minimum lease periods if the housing is not condominium

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<sup>5</sup> The *Policies* associated with *Goal* are "to preserve the aesthetic quality of the Town, to identify and protect critical environmental areas, to maintain the existing land use diversity within the Town, to focus development where adequate infrastructure either exists or may be economically provided, and to maintain the existing land use density and intensity regulations." See *Land Use Element* (Chapter 2) of this *Master Plan*.

### **Criteria for Location**

Determining appropriateness of multi-family availability of suitable sites. For the convenience of the Board, the Consultants are listing some important criteria for site selection.

- Zoning that permits the use
- Access from a major or secondary road
- Access that is not through a single family area, business area, or industrial area
- Available municipal water and sewer (a package plant would require use by a development larger than appropriate for Lunenburg)
- Buildable soils that are properly drained and made suitable for landscaping
- Location near public facilities if possible (library, Town Hall, Post Office, parks, and recreation)
- Location convenient to daily shopping

In reaching a decision about recommending zoning changes permitting multi-family use, the Board will need to consider the factors listed above, the political acceptance, and site development criteria. Tables 3-5, 3-6 and 3-7 may be helpful to the Board.

Table 3-5

**Advantages of Multi-Family Housing**

*The advantages of multi-family housing for occupants may be:*

- Affordability (starter housing, empty nesters, singles, for example)
- Offers a sense of community (especially for those living alone)
- Provides access to increased facilities, such as recreation and shopping
- May incorporate beneficial facilities needed by the physically impaired

*Advantages of multi-family housing for the Town may be:*

- Increased tax revenue
  - Fewer school children per unit
  - A positive cost benefit (service costs are lower than taxes generated)
- Often leads to greater open space preservation
- Is consistent with the Town Goal of "providing affordable housing units to the residents of the Town"
- Has potential for making a positive impact on the local economy by
  - Increasing commercial activities
  - Aiding the construction industry

**Disadvantages of multi-family housing**

*The disadvantages of multi-family housing for occupants may be:*

- Lack of privacy
- Possible proximity to incompatible neighbors
- Differing maintenance standards
- Perceived transience
- Noise

*Disadvantages of multi-family housing for the Town may be:*

- Increased municipal costs (may be offset by the reduced education costs per unit)
  - Providing utilities
  - Providing local streets and roads
  - Educating additional students
  - Providing other public services and facilities (fire, police, solid waste collection/disposal, and health, social services, and general government)
- Possibility of the design clashing with the Town's cultural and/or aesthetic appeal
- Environmental concerns
- Increased circulation (increased traffic) to be managed
- Perceived transience and lower neighborhood stability



**Fiscal Impacts of Various Housing Types**

**Table 3-6**

Type of Development	Revenue	
	To General Government	To Schools
Garden Condominiums (One/Two Bedrooms)	+	+
Garden Apartments (Three+ Bedrooms)	-	-
Townhouses (Two/Three Bedrooms)	-	+
Townhouses (Three/four Bedrooms)	-	-
Inexpensive Single family Homes (Three/four Bedrooms)	-	-
Expensive Single-family Homes (Three/four Bedrooms)	-	+
Accessory Apartments	+	-

*Based on Growth Impact Handbook. Department of Housing and Community Development, updated, but includes 1996 source material and a record of the experiences of similar communities.*

**Table 3-7**

Traffic and Circulation	
	Trips per Unit
Apartments	8
Single Family Homes	10

*Source: Institute of Traffic Engineers*

## F. Maintain Quality of Housing

To maintain the quality of existing houses, it is necessary to having adequate code enforcement, good municipal services, and wastewater provisions for problem areas.

- ***Establish a stronger code enforcement program***, administered under the auspices of the Building Department. This would require more time be devoted to zoning/code enforcement.
- ***Provide a technical homeownership assistance program.***  
[See *Affordable Housing* Section in this Element].
- ***Provide sewer or alternative treatment to areas of need.***  
[See Table 3-9 (page 17), which evaluates housing recommendations for Goal Satisfaction]

## Housing Recommendations

To achieve the Housing Goal and enact Policies that reflect the needs of Lunenburg residents, the following Recommendations are presented. Some of the Recommendations were made in 1991 to the *Innovative Housing Committee*.

### A. Appropriate and Affordable Housing

***Establish a housing coordination function in the office of the Planning Board.*** The Planning Board would be responsible for Housing as well as Land Use, for reviewing and reporting on proposed development plans, for assisting with zoning enforcement issues (in cooperation with the Building Inspector), and assisting with municipal planning efforts such as the *Open Space and Recreation Plan* and *Master Plan*.

*The housing coordination function would establish and implement the following Recommendations:*

- ***Apply for Grants.*** Because the State and Federal governments provide money through grants to communities each year for various community development projects (including housing and planning), the Town should prepare applications for grants whenever this money is made available. New programs are listed on-line, and should be investigated annually.
- ***Develop a Housing Education Program (HEP)*** to educate new and present residents about homeownership responsibilities and the resources that are available. Because many first time homebuyers are not aware of the numerous responsibilities that come with owning a home (such as mortgage, insurance, maintenance, proper boundary delineation, required land use regulations), a program educating individuals and landlords helps to assure responsible

homeownership and good neighbors. This program should be developed under the auspices of the Regional Planning Agency and/or the Town, with community assistance from local banks, real estate organizations and available grants. This program should be provided for free to all citizens who purchase a home in Lunenburg or in the region.

- ***Provide a technical homeownership assistance program.*** Because many homeowners are remaining in their homes for longer periods of time, as residents and homes get older, many homeowners need help replacing or fixing items. Through an organization of volunteers, the Town could facilitate this program to provide needed maintenance, assistance, and advice. Volunteers might include Seniors who previously worked in the building trades. Volunteers could be given a property tax credit for services rendered on the Town's behalf.
- ***Establish a clearinghouse for affordable properties.*** The Town could assist potential homeowners in finding affordable properties needing improvement.
- ***Inform developers of senior housing development opportunities.***
- ***Consider extending set-asides to conventional subdivisions*** by encouraging developers of ten (10) lots or more to provide at least ten percent (10%) of their proposed units as affordable housing units as defined by the Commonwealth. Affordable housing would remain affordable, through the use of resale deed restrictions or rental restrictions requiring units to remain affordable for at least twenty (20) years. For the purposes of calculating the ten percent (10%) affordable housing contribution, all numbers would be rounded to the nearest whole figure. Affordable housing units within market rate developments would be integrated with the rest of the development, and would be compatible in design, appearance, construction and quality of materials with the other units.

In lieu of developing affordable units, an applicant could provide a cash contribution of equivalent value to the Lunenburg Housing Authority or to any other non-profit provider of affordable housing that the Town may designate at a future date. The method of payment should be agreed upon between the applicant and the Housing Authority and should be secured as a condition of development approval.<sup>6</sup> Residential developments entirely

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<sup>6</sup> See Massachusetts General Laws, Chapter 121B, Section 11. This lists how housing authorities may use these funds.

comprised of affordable housing units, or limited to senior citizens or over age fifty-five residents could qualify for a waiver of the ten percent (10%) affordable housing requirement.

- *Encourage the formation of a non-profit organization that could advise people about shared housing*, its advantages, and its responsibilities.
- *Promote the development of starter homes* for first-time homebuyers and for low and moderate-income households seeking to locate in Lunenburg. The Town's actions could be on two levels. First, a public education program should be undertaken to educate developers on the need for starter-size homes. Secondly, the Town may amend the Zoning Bylaw to provide incentives for development of starter homes that are consistent with the Town character. This "density bonus" would be restricted to areas of Town best suited to handle increased density. These areas were determined in the Draft Waste Water Facilities to be the Town Center, the Whalom area, Baker Station, Lower Massachusetts Avenue, Lake Shirley, and Hickory Hills.
- *Undertake an inventory listing of vacant land suitable for development of affordable housing*. Make the inventory list available to developers, including non-profit developers, who seek to develop affordable housing. Developers would be responsible for negotiating with landowners for the sale of the land, and no landowner could be required to sell. The Town would incur some costs in preparing the list, but this can be kept to a minimum by soliciting assistance of citizen volunteers in preparing the inventory.

### **Housing Strategies and Recommendations**

Housing Strategies suitable for small towns were also examined for their usefulness to Lunenburg on **Table 3-8**, page 16.

Compatibilities of Housing Recommendations with the Housing Goal (listed on page 1 of this Element) are evaluated in **Table 3-9**, page 17.

## Conclusion

As noted earlier, the Town has zoning in place to accommodate assisted living, care facilities, accessory apartments, and planned developments. Although the Planning Board is now reviewing the regulations for assisted living units, there has been almost no use of the zoning provisions to date. The Town must, therefore, consider a program to make developers aware of these possibilities. [See *Moderate Income and Affordable Housing* Section of this Element.]

In addition, the Town should reconsider its position on apartments, and consider allowing their development in limited sewered areas. Such developments must be subject to strict guidelines to assure that the scale and design is consistent with Lunenburg's character.

Lunenburg should continue to provide a mix of housing alternatives, and should accommodate the fastest growing demographic group, the Seniors, by providing additional alternative housing options and/or other incentives to keep this substantial and vital demographic group in Town before any major Senior out-migration takes place. Senior housing alternatives include housing for persons of fifty-five years or more, assisted-living and continuing-care. These should be located in sewered areas. [See also *Economic Development* Element of the *Master Plan*].

Attention to the Town's housing needs, and understanding the recommendations of the *Housing* Element presented here will assist Lunenburg in meeting its housing goals, satisfying both the housing demands and the need for compliance with *Executive Order 418*.

## SELECTED HOUSING STRATEGIES

Table 3-8

Strategy	Potential Advantages	Potential Disadvantages	Potential for Lunenburg
Establish housing function in the office of the Planning Board	Position can be responsible various housing/community development strategies (see above)	Municipal expenditure required	Fair, because of expense
Establish a revolving fund for rent and/or mortgages	Can target loans to address needs. Proceeds can be recycled back into program.	Limited amount available to Town, State and Federal resources, or private funding Takes municipal staff time	Good, but limited by Town resources
Tax relief for seniors	Reduces ownership costs Helps to retain seniors	Loss of tax revenues	Good
Housing grants	Can target grant to address needs	Requires municipal staffing or consultant assistance; Limited available Town, State, and Federal resources	Excellent
Prepare clearinghouse for affordable properties	Encourages reuse of homes	Takes municipal staff time	Good
Publicize housing education programs	Promotes good homeownership and neighbors	Takes municipal staff time, bank support, and/or volunteers	Excellent
Require some affordable housing in larger subdivisions or money in lieu thereof	Provides additional affordable housing	Minimizes development incentives	Good/In place
Encourage assisted living, continuing care, and congregate housing facilities	May create a tax benefit to the Town No municipal expenditure	May not be suitable for all areas	Good
Code enforcement	Maintains and/or improves housing stock	Requires staff time	Good
Title 5 assistance	See <i>Municipal Services</i> Element	Requires staff time and municipal expenditure	Good
Non-profit housing trust	No public expenditure	None	Good
Require some affordable housing in larger subdivisions or money in lieu thereof	Provides additional affordable housing	Minimizes development incentives	Good/in place

## Compatibility of Recommendations With The Housing Goals

Table 3-9

Housing Recommendations	Goals and Policies		
	Provide affordable housing units	Encourage housing for low and moderate income families	Encourage a diversity of housing types
Coordinate activities of Town planning and housing in the office of the Planning Board	•	•	•
Apply for grants	•	•	
Develop a housing education program	•	•	
Establish a clearing house for affordable housing listings	•	•	
Inform developers of opportunities	•	•	•
Extend set-asides	•	•	•
Assist in providing income shared housing	•	•	•
Adopt ZBA rules to aid applications	•	•	•
Encourage Planned Development			•
Establish stronger code enforcement			•
Provide avenues for alternative systems to address need (continuation of town programs)	•	•	•
Promote starter homes to developers	•	•	•
Inventory vacant developable land and Town owned land	•	•	•

Investigate creation of a Zoning Bylaw to allow for conversion of large buildings and/or homes	•	•	•
Property Tax Surcharge	•	•	•



## Economic Development

### Introduction

Lunenburg is an attractive, stable, but financially pressed community in the northeastern part of the Fitchburg-Leominster area in Massachusetts. It is bisected by Route 2A, and is 10 miles from an interchange of the Route 2 superhighway. The largest employer is the Town itself. *Ecological Fibers* is the Town's largest manufacturer, and *P.J. Keating's Gravel Works* provides employment (some seasonal) in the extractive industry. A *Wal-Mart* and other commercial operations provide additional employment. The future of the Whalom Amusement Park, a large seasonal employee, is not clear.

Boston's outer beltway I-495 and I-190, connecting to Worcester has attracted high tech industry to the area, but as yet this has made little or no impact on Lunenburg.

The residents of Lunenburg undertook an *Envision 2007*, a Visioning Program. They determined that the main benefit they sought from economic development was increased assessed value, which would have the effect of controlling growth in the tax rate. In other parts of this *Visioning* Program, the community determined that preserving the rural nature of their Town was also a high priority.

Lunenburg has set aside land for industrial parks, and is providing them with public sewer and water. There is potential for additional development in the far future when the gravel works are depleted or no longer economically viable. However, there is no ongoing program to promote economic development in the Town or to provide the marketing and information necessary to draw it to the attention of businesses exploring relocation or expansion.

In addition, Lunenburg faces stiff competition for new growth from communities that are closer to the super highway system and from a Commonwealth-coordinated and funded effort to redevelop the surplus Fort Devens Airbase. These competing areas are close enough for Lunenburg residents to find work in them, and possibly to attract new residents to Town. Of course, no taxes flow from these business areas into Lunenburg, so the impact of development such as Fort Devens is not likely to improve the Town's fiscal situation.

In view of this situation in Lunenburg, its economic development program should focus on the following areas:

- Develop and market the existing industrial parks and industrially-zoned areas.
- Attract and support small and home businesses.
- Develop support for existing businesses, and encourage them to in turn support the Town, preserve its rural character, and help market the community to other businesses.

## **I. Nature of Economic Development in Town Planning**

### ***A. Issues in Economic Development Planning***

Economic Development is one of the most important, interesting, and difficult parts of a *Master Plan*. Successful economic development programs help the community by:

- Increasing the tax base, resulting in slowing the growth of the tax rate while allowing the community to maintain or increase services.
- Providing jobs.
- Providing services.

Together, these make the Town more attractive to both residents and businesses alike. On the other hand, excessive economic development can dramatically change the nature and character of a town by:

- Increasing housing demand and costs, thereby creating hardships for long-time residents (if Lunenburg's demand for housing is met, that increases school and other costs).
- Adding to traffic and environmental problems.
- Changing the image of the Town.

Economic development is also unique because it is the one area where neighboring towns must both cooperate and compete with each other. *Cooperation* is necessary to attract or support new or growing businesses because this requires the resources of the region. *Competition* is necessary because the direct financial benefits of new businesses (especially real estate taxes) are concentrated in the Town where the business locates, while any negative impacts are usually spread much wider.

Unlike other aspects of the *Master Plan*, economic development usually requires the town to control business and yet pro-actively attract business at the same time. This creates a basic conflict as decision-makers try to successfully bring new tax paying, job providing uses into the community, yet still protect the existing semi-rural environment and culture.

To complicate matters further, the nature of economic activity in the nation, and indeed, in the whole world, is changing rapidly. In the past two decades we have seen malls replace downtowns, 'big-box' freestanding stores weaken the dominance of malls, and most recently, electronic commerce attack the future viability of even the 'big box' stores. In the same period, big cities have started to lose their downtown functions to "edge cities", and advances in telecommunication technology and computing power have allowed rural areas to attract small businesses. Many of the businesses that locate in small towns and rural areas are the result of new technologies and changes in corporate structures. These changes are so recent that many of these new businesses are in fields that did not even exist in the 1980s.

These changes and their complications bring to towns such as Lunenburg new problems but they also bring new opportunities. This requires clear planning, and, if economic development is to increase, direct action. These actions may include:

- Planning for changes
- Making zoning changes
- Making changes to the structure of Town government
- Investing in marketing
- Developing infrastructure

By completing the Economic Chapter of the *Master Plan*, Lunenburg is taking a major step toward minimizing problems and taking advantage of potential opportunities.

## ***B. General Economic Development Goals***

While each community must set its own goals for economic development based on the needs and Vision of its community members, the economic development process itself has its own set of objectives based on efficiency. Economic Development Goals specific to Lunenburg are discussed in this Element, Part II, following on page 5.

### ***General Economic Development Goals:***

- *Keep and grow what you have.* Unless existing businesses are undesirable or are part of an industry that is shrinking or relocating out of the region, a town's first economic development efforts should be to find out what it can do to help its existing businesses stay, grow and prosper. This is a process that starts with communication and then moves to action. It can include infrastructure improvements, especially improvements such as access, providing water and sewer, and other steps to reduce costs and make the company more competitive. It could also include a marketing effort to attract companies, suppliers or clients to the area, who are similar to those already there.
- *Provide sewer, water and other utilities.* Three things that businesses considering a new site fear most are costs, delays and uncertainty. Having to provide your own water and sewage system saddles a site with all three. This is especially true for most of today's high-tech start-up companies incubated in urban areas, where such infrastructure is already in place.
- *Wage rates of major new employers should not be much higher or much lower than those of exiting major employers.* If a new business hires a significant portion of its labor force at rates above those currently paid in town, they may attract the best employees from the existing companies, leaving those companies more vulnerable. Wage rates and skill levels that cannot easily be met by local labor will attract employees from outside the community, resulting in traffic and pollution increases.
- *Attract jobs for the existing labor force.* If a new company requires a different kind of labor force from one already existing in town, such as a high-tech research company coming to a community where most of the residents are employed in blue collar and retail positions, major changes in population and housing in could result.
- *Update zoning to reflect changes in business and technology.* One area that often needs to be examined is prohibitions on home offices and other businesses operating from homes. In the past, most home businesses brought traffic, noise, advertisements, or other impacts into a residential community. Today many home-businesses communicate solely through phone, mail, fax, and e-mail. Traffic impacts are frequently limited to visits from an express delivery truck. These home-businesses can provide many benefits to the community, including taxes, employment, attraction of semi-retired professionals (who usually have no school

children), and increased neighborhood safety as a result of a larger daytime population in residential areas. In addition, these businesses provide income for the local commercial businesses, including restaurants, office supply stores, copy shops, and others.

- *Provide information (marketing).* With over 350 cities and towns in Massachusetts alone, economic development efforts are dependent on creative and effective marketing to get the message out. Advances in electronic communication allow new and growing companies to consider locating anywhere in the country, or even anywhere in the world. This is an advantage to communities such as Lunenburg, because it means that attractive businesses are no longer tied to large cities as they were until the end of the last decade. It also means that companies have options, and are likely to pay most attention to those communities that make it easy to find out why they are good sites. Marketing can be accomplished as a joint effort between the town and local businesses, or by business groups such as the Chamber of Commerce.
- *Provide telecommunication infrastructure as good as possible and as soon as possible.* Advanced telecommunications capabilities can provide to small towns many of those same benefits in the "knowledge age" that high-speed super-highways provided in the manufacturing age. They remove some of the cost and almost all the time from distance, making physical location in relation to consumers less important. Telecommunications can also help minimize some of the problems of small town living, such as lack of educational options, lack of cultural opportunities, or lack of high quality medical care, especially for medical emergencies.

## **II. Economic Development Goals for Lunenburg**

Because of the conflicts described in the previous section, Lunenburg must clearly establish its Goals for economic development in order to create a successful plan. Economic development goals can both support and conflict with other Town Goals. In planning and in day-to-day decision-making, Lunenburg must weigh the benefits of economic development against the problems it can also create. In small rural towns such as Lunenburg the constraints often are centered on the conflict between the need for new jobs and taxes and the desire to maintain the historic rural character of the community.

The following section of this Chapter presents Economic Development Goals as determined by the community of Lunenburg. It also lists non-economic development Goals that limit or constrain development in order to meet aesthetic, environmental and historic preservations concerns of the community. Tools and action items to implement these goals are presented beginning on page 14.

**A. Economic Development Goals Determined Prior to Envision 2007**

In the report Lunenburg in 2007, produced during the Envision 2007 process, a list of Goals and Policies from preceding studies is also included<sup>1</sup>. Many of these economic development goals came from a previously prepared Growth Management Report.

**Goal: Encourage Economic Development In The Town**

*Policy:* Improve existing industrial and commercial areas.

*Policy:* Provide accessible and diverse community facilities.

*Policy:* Encourage industrial and commercial development compatible with available resources and facilities, and that provides job opportunities for residents.

*Policy:* Augment the tax base.

*Policy:* Implement Sewer Plan.

*Policy:* Encourage non-residential growth in sewerred areas.

**B. Goals Developed During Lunenburg's Envision 2007**

During the *Envision 2007* process itself, the community combined 'Economic Development' with 'Fiscal Planning'. Instead of Goals and Policies, the Envision plan was organized into *Action Plans*, *Tasks*, and *Objectives*. By far the majority of the Tasks that were determined related to Fiscal Planning. Only one focused on Economic Development.

**Action plan:** Develop an economic base to augment the tax rate.

**Tasks:**

- Create an *Economic Development Committee*.
- Develop factors fostering a healthy business climate.
- Determine sewer construction, based on the *Facility Plan*.

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<sup>1</sup> Goals and Policies in *Lunenburg in 2007*, Table 5, Lunenburg Planning Commission, 1998

- Review the performance standards in the Zoning Bylaw.
- Consider tax incentives for start-up businesses.
- Attract appropriate commercial and industrial enterprises to Lunenburg.
- Plan for economic development in industrial/commercial districts that will broaden our Town's Tax Base.

**Objective:**

Devise a procedure to entice appropriate commercial and industrial enterprises in order to secure more non-residential revenues.

**C. Specific Economic Development Goals and Policies endorsed by the Planning Board:**

**1. Encourage Economic Development in Town by:**

- Improve the existing industrial and commercial areas.
- Encourage industrial and commercial development that is compatible with available resources and facilities, and which will provide job opportunities to people living in Town.
- Augment the tax base.
- Encourage non-residential growth in sewerred areas, and explore expansion of sewerred areas.
- Create an *Economic Development Committee or Commission*.
- Attract appropriate commercial and industrial enterprises to Lunenburg.
- Encourage appropriate development of the Whalon area.

**2. The Economic Goals and Policies are constrained, to a certain extent, by the Town's other Goals, such as:**

- Preserving the rural characteristics of the Town.
- Preserving the aesthetic quality of the Town.

- Protecting critical environmental areas.
- Focusing development where adequate infrastructure now exists or where it may be economically provided.
- Maintaining existing land use density.

### III. The Existing Situation

#### A. Regional Conditions

##### 1. Location

Lunenburg is located in the Montachusett region. The region is made up of several clusters of industry, each somewhat independent in nature and each contained within the boundaries of a specific community, i.e., Leominster (Plastics), Fitchburg (Paper), Gardner (Wood), Ayer (Food). All these communities influence Lunenburg because they provide job opportunities for the Town's residents and because of economic activity generated along the major transportation routes associated with the industries (Interstates 190 and 495, and Route 2). The ongoing redevelopment of the Fort Devens Air Force Base area also affects the Town.

The Fitchburg-Leominster metropolitan area, of which Lunenburg is a part, has a somewhat limited economic identity. In a report on the region's economy, the *Montachusett Regional Planning Commission*<sup>2</sup> recommended that the member cities and towns make a concerted effort to understand the needs of those particular industries already established throughout the region in order to maximize opportunities for growth, and work to promote these industries.

In 1999, Fitchburg announced plans for development of a \$60 million high technology research and industrial park that will utilize the proximity of Fitchburg State College, the *Massachusetts Innovation Center*, and the space from a former General Electric factory that closed in 1998<sup>3</sup>. This complex will focus on the needs of the 'E-marketplace' (electronic commerce) now being created by the rapid growth of Internet businesses.

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<sup>2</sup> *Community Economic Development Report*, Montachusett Regional Planning Commission, December 1996.

<sup>3</sup> *Worcester Business Journal*, Volume 10, No. 3, April 12, 1999, p 6.



Fort Devens, a former Air Force Base that was closed in the early 1990's, has reopened as a business park for environmentally related businesses and industries. It has become, and is expected to expand as a regional economic generator for those fields. The impact on Lunenburg of any substantial development at Fort Devens will probably primarily be providing jobs for residents and increasing demand for housing.[See *Housing* Chapter of the Master Plan] On the negative side, new development and infrastructure at the former fort area, coupled with marketing and financial support from the State government, will make it a serious competitor with Lunenburg as a site for new businesses.

## **2. Access**

Located ten miles from the junction of Route 2 and the more recently constructed Interstate I-190, Lunenburg has excellent access to the south (Worcester, and Hartford, Connecticut) and east (the Greater Boston metropolitan area and the new high-tech companies along Boston's outer beltway, Interstate I-495). Interstate I-495, reached via Route 2, is about 8 miles east of Lunenburg. Adjacent to Lunenburg to the west are the "twin cities" of Leominster and Fitchburg.

Within Lunenburg, all of the roads are rural. This limits new businesses that depend on large trucks or large traffic flow. Most of the Town's existing industrial zones, however, are in the southern section of Lunenburg, the part of Town nearest to the State- and Inter-state highway systems.

## **B. Local Conditions**

### **1. Economic Base**

- *Employment*

The majority of Lunenburg's employed residents work within a ten (10) mile radius of Town. Statistics from the *Massachusetts Division of Employment and Training (DET)* indicate that the largest sources of employment in Lunenburg are wholesale and retail trade, service industries and Town Government. The construction industry more than doubled in the last decade, reflecting a growing local and national economy impacting the housing trades.

In 1999, 189 establishments existed in the Town of Lunenburg, employing a total of 2,213 full and part time workers. These jobs provided workers with an average wage of \$28,602, among the lowest wage in the region and the lowest of Lunenburg's immediate neighbors, as shown in the Table 4-1

**NUMBER OF ESTABLISHMENTS AND AVERAGE WAGE  
FOR LUNENBURG AND NEIGHBORING COMMUNITIES**

Table 4-1

1999-2000				
Community	Number of Establishments	Number of Employees	Average Wage	Unemployment Rate
Ashby	47	210	\$24,445	3.9 %*
Fitchburg	949	14,980	\$29,291	4.0 %
Lancaster	144	2,753	\$27,247	2.1 %
Leominster	1,151	18,652	\$28,197	4.0 %
Lunenburg	189	2,213	\$28,602	3.4 %
Shirley	106	2,067	\$38,845	2.6 %
Townsend	155	2,275	\$28,441	2.6 %
<b>Totals</b>	<b>2,741</b>	<b>43,180</b>	<b>\$29,010 (Avg.)</b>	

Source: Massachusetts Division of Employment and Training (DET) data  
\* 2000 Figure

Reviews of employment trends show that dramatic rises in the trades have taken place during the last half of the 1990s. *Manufacturing* also grew during this period. Not surprisingly, *construction* rose, partly due to expansion in the other two areas, requiring new facilities.

*Services*, which grew rapidly during the end of the previous decade, have declined somewhat. *FIRE (Finance, Insurance, Real Estate)* is at a low level, indicating that they are primarily serving the local community at this time.

The *Massachusetts Division of Employment and Training (DET)* also estimated Lunenburg's labor force at 4,898 persons. The average unemployment rate was 2.9% percent, which was slightly higher than the State average unemployment rate of 2.6%. During the 1990's, unemployment on the whole, continued to decrease both nationally and locally, as the economy has produced more jobs. Lunenburg has typically maintained an unemployment rate slightly below or on par with State and Regional levels.

- *Income*

In 1990, the median household income in Lunenburg was at \$43,199, compared with an average per capita income as reported by the U.S. Census Bureau of \$19,166. Family income levels in Lunenburg have been generally above regional and State levels (approximately 15% higher in 1990).

- *Employment*

Seasonal employment is a factor in Lunenburg, since several large employers expand staffing in the summer months. These have been Whalom Amusement Park and P. J. Keating but, as noted previously, the future of Whalom Amusement Park is in question. Other large employers in Lunenburg include the retail establishments at Lunenburg Crossing, GeoGlobal, Ecological Fibers, Wal-Mart, the Maki Home Center, and the Town government. The largest employer of full-time workers in Lunenburg is Town government itself.

- *Telecommuting*

Telecommuting, when a person works from either his/her home or from nearby satellite offices, has become a force in the economy. As the power and use of personal computers and the Internet increase, and employers hire small firms and contract workers rather than employing full-time staff, telecommuting is becoming a larger segment of the employment base. Because statistics on telecommuting are not yet kept, it is difficult to determine the extent of this segment of Lunenburg's workforce; however, the last statistics available indicate that the percentage was 7%.

## 2. Tax Base

Lunenburg's 2001 property tax rate is \$15.60. Table 3-2 illustrates trends in municipal property tax rates for Lunenburg and nine (9) of its closest neighbors, from 1994 to 1998.

There are presently over one hundred tax-exempt properties in Lunenburg, encompassing almost 2,700 acres. Properties that are not taxed by the Town include State, municipal, and non-profit lands, including private schools and churches, and they represent over sixteen percent (16%) of all land in Lunenburg.

In general, *non-residential land use* is a fiscal plus for a town, as it often provides more income from taxes and fees than the cost of the services consumed. *Residences* are generally considered a fiscal negative; the main contributing factor to this is schools. There are other residential needs (such as voter services) that are not increased by non-residential uses.

The Planning Board plans a study of vacant Town owned land in 2002.

The average 2001 tax bill for a single-family home in Lunenburg was approximately \$2,650. There are presently over one hundred tax exempt properties in Lunenburg, encompassing almost 2,700 acres. Properties that are not taxed by the Town include State, municipal, and non-profit lands, including private schools and churches, and they represent over sixteen percent (16%) of all land in Lunenburg.

In general, *non-residential land use* is a fiscal plus for a Town, as it often provides more income from taxes and fees than the cost of the services consumed. *Residences* are generally considered a fiscal negative; the main contributing factor to this is schools. There are other residential needs (such as voter services) that are not increased by non-residential uses.

Although high tax rates are seen as a negative factor in attracting new businesses, their actual impact on decisions for business locations is likely to be minor unless high tax rates are far above neighboring or competing communities. Compared to land costs, building development, finding, hiring and training new employees, minor variations in tax rates are insignificant. Companies attracted by low tax rates or special tax deals are likely to move on when a better deal is offered them.

#### ***Land Available for Development***

The vacant properties in Lunenburg, just over 1,300 acres, have the potential to significantly impact the course of life in Town. Of these 1,300 acres, roughly three hundred (300) acres are zoned for primarily commercial development. Six hundred (600) acres are zoned for office park/industrial development. The areas for industrial development are in the southeast and southwestern sections of Town.

#### **Location of Commercial Development Potential**

As shown on **Table 4-2**, Lunenburg has four zones that allow commercial and industrial development.

#### **COMMERCIAL AND INDUSTRIAL ZONES IN LUNENBURG**

**Table 4-2**

<b>Zone</b>	<b>Location(s)</b>
Limited Business/Residential	Along Rt. 2A, west of Town Center
Commercial	Baker Station, Rt. 2A west of Rt. 13, Rt. 13 toward Townsend, Town Center, Rt. 2A near Shirley
Retail Commercial	Townsend Harbor Rd north of 2A
Office Park and Industrial	Summer St. in Southwest corner, Shirley Rd in Southeast corner

The Town of Lunenburg's only agreed-upon retail growth centers are those that already exist, in the commercial and Civic activity area in the Town Center, and along Route 2A west from the Town Center. Vacant commercial and industrial developable property does not represent all the potential for economic development, since property already developed may have capacity for additional use. This is especially true for extractive industries and other businesses that have a limited future.

Unfortunately, Lunenburg has few industrial or commercial activities to expand. As noted, Lunenburg relies heavily on residential property for its tax base, and increases in the residential property tax rate are likely to continue unless more intensive commercial and/or industrial development is generated to help offset residential costs. However, with the absence of a defined growth center or main industry in Town, most new jobs will be created in the neighboring Cities of Leominster and Fitchburg or other nearby growth centers are located, e.g., the reuse of Fort Devens, to provide employment for Lunenburg residents.

## Recommended Actions and Policies

### *Tasks for the Town*

- **Develop a Site Finder Resource** – Identify and make ready for dissemination information about non-residential land that is available for development in the Town. Consider using the Internet as one way to make information easily accessible.
- **Provide Sewer and Water Service to existing businesses and areas proposed for development** – The dollar, time and uncertainty costs of providing water and sewer services are strong barriers to the attraction of new businesses or the growth of existing ones.
- **Encourage High Quality, High Speed Communication System** – Modern businesses require a telecommunications system that can meet their needs for speed quality and dependability. Recent studies have shown that the growth in the number of communication lines and phones numbers has greatly exceeded all projections. Sufficient circuits and phone numbers should be available to handle two to three times the expected growth. Although communications systems are provided by private utilities, Towns can encourage rapid upgrading of service.

- **Develop specific targets for economic development efforts and detail the steps needed to achieve them** – Consider focusing efforts on the growing trade sector, historic recreation facilities, home and small businesses, new technologies, and continuous-care and assisted living development projects.
- **Work with existing businesses to help them stay and grow in Lunenburg.**

*Find out from existing businesses what other businesses they would like to have in the Town*

*Find out from existing businesses whether they need training programs for employees or help in hiring.*

*Encourage businesses to establish local and/or Town-wide organizations that would upgrade existing commercial areas, by*

- Improving signage
- Landscaping, especially concealing parking and outdoor storage areas
- Combining curb cuts
- Coordinating marketing efforts, business hours, and special sales and other events
- Developing Town logos and other identifying marks

### **Tasks for an Economic Development Commission or the Planning Board**

- Study the nature of new developments in Fitchburg and at the former Fort Devens, and develop strategies to attract complimentary businesses.
- Assign specific Lunenburg representatives to work with regional and statewide economic development efforts.
- Put together an economic development marketing program for Lunenburg, and enlist support of local businesses to promote Lunenburg in their advertising literature and at sales shows and conferences.

### **Tasks for Planning Board**

- **Review zoning and other regulations** to assure that they support business development and expansion. Revise regulations, as appropriate, with specific attention to the Whalom area, stream-lined permitting and design standards.

- *Learn about, and when appropriate, apply for State and Federal support programs for Economic Development planning and projects.*
- *Plan for a decline in existing businesses in response to economic changes or depletion of natural resources, etc.*
- **Investigate promotion of assisted living** – Evaluate assisted living projects as sources of jobs and taxes.
- **Support home based business development** – Undertake a study of home-based businesses to see what problems exist and what problems home-based businesses cause. Take steps to attract the types of home-based businesses that are best suited to Lunenburg.
- **Market Lunenburg's distinctiveness and rural quality** – Protect, enhance and market Lunenburg's distinctive rural character.
- **Undertake a study to determine if there is a market for Bed and Breakfasts, bicycle rentals and other leisure related businesses.**



## ECONOMIC ELEMENT STRATEGY EVALUATIONS

Table 4-3

<i>Strategy</i>	<i>Goals Satisfied</i>	<i>Issues Addressed</i>	<i>Evaluation of Strategy</i>
Develop a Site Finder Resource.	•	Job Creation	Low Cost
Provide Sewer and Water Service to existing businesses and areas proposed for development.	•	Protect Economic Base	Cost Effective
Encourage High Quality, High Speed Communication System.	•	Encourage Economic Development	May be costly
Develop specific targets for economic development efforts and detail the steps needed to achieve them.	•	Encourage Economic Development	Cost Effective
Work with existing businesses to help them stay and grow in Lunenburg.	•	Protect Economic Base	Cost Effective
Find out from existing businesses what other businesses they would like to have in the Town.	•	Protect Economic Base	Low Cost
Find out from existing businesses whether they need training programs for employees or help in hiring.	•	Protect Economic Base	Low Cost
Encourage businesses to establish local and/or Town-wide organizations that would upgrade existing commercial areas.	•	Protect Economic Base And Encourage Economic Development	Low Cost
By landscaping, especially concealing parking areas and outdoor storage areas.	•	Appearance and Character of Town	Low Cost
By combining curb cuts.	•	Safety	Low Cost
By enforcing sign regulations.	•	Safety and Appearance	Low Cost

**Table 4-3 ECONOMIC CHAPTER STRATEGY EVALUATIONS, continued**

<i>Strategy</i>	<i>Goals Satisfied</i>	<i>Issues Addressed</i>	<i>Evaluation of Strategy</i>
By developing Town logos and other identifying marks.	•	Appearance	Low Cost
By coordinating marketing efforts, business hours, and special sales and other events.	•	Encourages Business	Low Cost
Study the nature of new developments in Fitchburg and at the former Fort Devens, and develop strategies to attract complimentary businesses.	•	Protect Economic Base	Low Cost
Assign specific Lunenburg representatives to work with regional and statewide economic development efforts.	•	Create Jobs	Low Cost
Encourage business to develop a marketing program for Lunenburg, and enlist support of local businesses to promote Lunenburg in their advertising literature and at sales shows and conferences.	•	Protect Economic Base  Create Jobs  Encourage Economic Development	Cost may be High
Review zoning and other regulations to assure that they support business development and expansion. Revise regulations as appropriate.	•	Protect Economic Base  Create Jobs  Encourage Economic Development	Low Cost
Learn about and when appropriate apply for State and Federal support programs for Economic Development planning and projects.	•	Encourage Economic Development	Low Cost

**Table 4-3 ECONOMIC CHAPTER STRATEGY EVALUATIONS, continued**

<i>Strategy</i>	<i>Goals Satisfied</i>	<i>Issues Addressed</i>	<i>Evaluation of Strategy</i>
Investigate assisted living.	•	Housing Needs	Limited Public Costs
Plan for a decline in existing businesses in response to economic changes or depletion of natural resources, etc.	•	Economic Cycles	Low Cost, Cost Effective
Undertake a study of home-based businesses to see what problems exist.	•	Economic Development	Cost Effective
Take steps to attract the types of home-based businesses that are best suited to Lunenburg.	•	Economic Development	Cost Effective
Market Lunenburg's distinctiveness and rural quality.	•	Economic Development	Cost Effective
Undertake a study to determine if there is a market for Bed and Breakfasts, bicycle rentals and other leisure related businesses.	•	Potential Economic Development	Low Cost

## ECONOMIC CHAPTER RECOMMENDATIONS

Table 4-4

RECOMMENDATIONS	PHASE			JUSTIFICATIONS
	One	Two	Three	
Develop a Site Finder resource.	•			Satisfies Goals Low Cost
Investigate providing sewer and water to existing businesses and areas planned for development.	•	•	•	Satisfies Goals Cost Effective
Continue encouraging installation of a Town-wide high quality, high speed communication system.	•			Satisfies Goals
Develop specific economic targets and detail the steps needed to achieve them.	•			Satisfies Goals
Work with existing businesses and their needs.	•			Satisfies Goals Low Cost
Find and evaluate state and federal programs to support economic development efforts.		•	•	Satisfies Goals Low Cost
Support home-based businesses.	•	•	•	Satisfies Goals Low Cost

## OPEN SPACE AND RECREATION, NATURAL AND CULTURAL RESOURCES

### Goals

In *Envision 2007*, the Town articulated its Goals for

*Land Use, Open Space, and Natural Resources* combined together. These Land Use, Open Space, and Natural Resources Goals are

*To Preserve The Rural Residential Characteristics Of The Town*

*To Promote More Efficient Land Use*

*To Protect Natural Resources*

### Statement of Purpose

The purposes of the Natural and Cultural Resources, Open Space and Recreation Elements in the *Lunenburg Master Plan* are

- To further develop Goals and Strategies
- To provide a guide for preserving and enhancing the natural resources
- To aid in achieving a balance between development and preservation
- To meet recreation needs of residents

### Introduction

The Town is aware of the need to care for its natural resources and recreation facilities, and is cognizant of the rewards of advance planning. A separate Open Space and Recreation Plan, part of an on-going and progressive planning effort of the Town government, was prepared in response to the recognized need to maintain an up-to-date planning base and to meet the eligibility requirements for funding programs. The Town prepared the Open Space and Recreation Plan in 1993<sup>1</sup>, building on the Conservation Recreation Plans of 1978 and 1985 prepared by the Conservation Commission and Parks Department. The Open Space and Recreation Plan was organized in accordance with the Eligibility Requirements for the *Federal Land and Water Conservation Fund* and Massachusetts Self-Help Programs.

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<sup>1</sup> Open Space and Recreation Plan, prepared in 1993 by the Lunenburg Planning Board in cooperation with the Conservation Commission, The Town Forest Committee, and the Park Commission.

## Planning Process

This Element of the Master Plan has been developed by the Lunenburg Planning Board in cooperation with the Conservation Commission, Parks Department, and School Committee. It builds on the 1993 Plan and a 1998 update of the 1993 Plan. The Planning Board acted as the coordinating agency, gathering information from other cooperating departments about recreational and other uses of Town-owned land, and then incorporating the data and accompanying comments into this Element.

The *Land Use and Open Space* sections were prepared prior to the *Natural and Cultural Resources* portion primarily so that the Town would have available to it a complete current Open Space Plan as discussed on the previous page. The result is some information overlap between the Open Space Plan and this Open Space, Natural and Cultural Resources and Recreation Element of the Master Plan.

In this Element, significant natural resources are identified, and then recommendations to protect these resources are made, particularly to

- Acquire open space to connect existing open space along Town boundaries
- Adopt environmental guidelines
- Manage forests
- Protect groundwater

Much of the Element follows a format used earlier, with updated information and text added for continuity and to account for changes over time. To conserve resources and avoid duplication of effort, portions of this report were excerpted directly from the following previously prepared reports and planning studies:

- Benjamin, Allen, A Plan for Lunenburg's Future; Lunenburg Planning Board, December 1961
- Lunenburg Conservation Commission and Lunenburg Parks Department; Town of Lunenburg Conservation/Recreation Plan, 1985
- Thomas Planning Services, Inc., Growth Management Plan; Lunenburg Planning Board, 1989
- Thomas Planning Services, Inc., Strategic Planning Grant Report; Lunenburg Planning Board, 1989
- Draft Lunenburg Open Space and Recreation Plan; May 1998; Contact, Brian O. Butler

## **Community Setting**

Lunenburg is located in Northeastern Worcester County, approximately forty-seven (47) miles northwest of Boston and twenty-seven (27) miles north of Worcester. The Town is bordered on the north by Townsend, on the east by Shirley, on the south by Lancaster and Leominster, and on the west by Fitchburg and Ashby.

Lunenburg is 27.69 square miles in area, including open water bodies comprising approximately 1.3 square miles. The Town Hall, located in the Town Center, is at an elevation of 570 feet above sea level.

The Town is both an agricultural community and a bedroom suburb of Fitchburg. Residential development is displacing agriculture and open lands formerly in agriculture. Commercial and industrial development is limited and clustered along Route 2A (Massachusetts Avenue), Route 13, and in the southeastern section near Leominster-Shirley, Route 70. Traditionally Fitchburg has served as the employment, retail, business and service center for the region, providing services usually available in a core city, and absorbing much of the growth in the region.

In the 1980's, and again in the current decade, Lunenburg has experienced a change in the intensity and character of development pressures. A 1995 commercial complex anchored by Wal-Mart has increased the level of traffic entering the Town from surrounding communities. The Fitchburg metropolitan area, once dependent on employment in the slow-growth paper industry and the plastics industries, has diversified into more rapid-growth industries.

Major transportation routes have been rebuilt and upgraded in the past two decades, facilitating commuting to the Boston, Worcester and southern New Hampshire areas. Route 2, the nearest artery, approximately six miles from the Town Center, links commuters to I-90/I-290 and to I-495 in about fifteen minutes.

Housing prices in the region have been historically lower than in towns within the Route 495 metro-west region. Although this has placed considerable residential development pressure on Lunenburg and surrounding communities and has thus raised real estate prices, relative pricing between metro-west and Lunenburg area real estate continues to widen. This is and will continue to exert considerable development pressure on the Town. Because most of the current development is moderately priced residential housing, the demands upon town services are likely to increase while the additional tax revenue will fall short of school and other actual service costs.

The Town has also seen increase in residential development. The Planning Board has recently approved or is presently reviewing several large subdivisions and is aware of several more in the project preparation stage. Much of the development that has occurred or has been approved in the past several years has been in large-scale projects of fifty or more dwelling units. In addition to the residential development, the Planning Board has reviewed several large commercial/industrial developments and is aware of more that are in the design stage. The Town has a small but dedicated municipal staff and hard working volunteer board members. In recent years, Town officials have had to familiarize themselves with the techniques that address growth, and the need to respond quickly to increased demand for municipal services. With the assistance of professional consultants, the volunteer staff has worked to improve the ability of the Town to address the changes that growth may bring.

Much of the land in Lunenburg is not well suited for development. Soils are such that sewage disposal is difficult without specialized systems. Clay and ledge limit the amount of land available for development. As a result, much of the Town is open, providing the amenity of a small-town rural character.

The Lunenburg Water District supplies the Town with water from ground water wells. The increase in development threatens to not only increase the demand for water, but also the quality of the supply. The Town needs to address issues of water supply and quality.

Although demand for housing has increased, there is little opportunity to provide housing at less than market rates. These changes, limitations and amenities have increased desirability of existing housing and vacant land for residential development in Lunenburg, and this housing desirability threatens environmentally sensitive land and the Town's water supply.

**NOTE:** Much of this Element is taken directly from Open Space and Recreation Plan. Some data is repeated from other Elements so that this Element can be used independently from the rest of the Master Plan. See the Open Space and Recreation Plan for more information and recommendations. At this writing, the Town is considering the purchase of two additional parcels, totaling 29 acres, one on Goodrich Street and one on Clarks'Hill.



## History of the Community

Lunenburg's first settler was Samuel Page, who came from Groton in 1718, building a stockaded cabin on the south side of Clark's Hill (now Clark's Hill Conservation Area). The following year, the General Court Committee began to survey the land. Land grantees began to build in the Town in 1726, and the Township of Turkey Hills was started in 1728. The original Proprietor's Lots were laid out in rectangles one-half mile long by 45 rods<sup>2</sup> wide. Parallel stone walls marking the borders of the original Proprietor's Lots one-half mile apart are still apparent in areas of the Town.

It is said that an English lord traveling through the area, who held the title Duke of Lunenburg, Germany, bestowed the name 'Lunenburg' on the Town in honor of King George II. A bronze bell, later sent as a gift by the King, was sold at the dock to pay its freight because the townspeople were unable to pay costs of bringing it inland from Boston.

The Town Pound, a stone walled structure built in 1750 to hold stray farm animals, still stands north of the Center, and an appointed "pound keeper" has overseen the structure to the present time.

Among early land grants were the *Woburn Farm*, consisting of two thousand (2,000) acres on the west side of Town, and the one thousand (1,000)-acre *Dorchester Farm*, part of which lies in present day Fitchburg. Harvard College was also granted 250 acres. Fitchburg, named for John Fitch, an early settler in the region, was set off in 1764.

Saw- and gristmills were constructed along Mulpus Brook beginning in the early 19th Century. It was noted that flow from many of Lunenburg's brooks was only seasonally sufficient to operate some of the mills. Early local industries included the manufacture of potash and bricks, tanning, bookbinding, and printing. For a time, straw hats and watches were also manufactured.

Mulberry trees were extensively planted in the area of Clark's Hill in a 19th Century attempt to generate a silk industry in Lunenburg. Somewhat more successful endeavors that continued through the 19th Century included cabinet making, the manufacturing of shoes, and the making of felt hats.

In 1830, Cyrus Kilburn was commissioned by the General Court to survey the Town, and in 1833 a map showing land features and current homes was prepared from his survey.

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<sup>2</sup> A rod is a linear measure equal to 5.5 yards, 16.5 feet, or 5.03 meters.

Persons of regional or national note who lived in Lunenburg or came from the Town include:

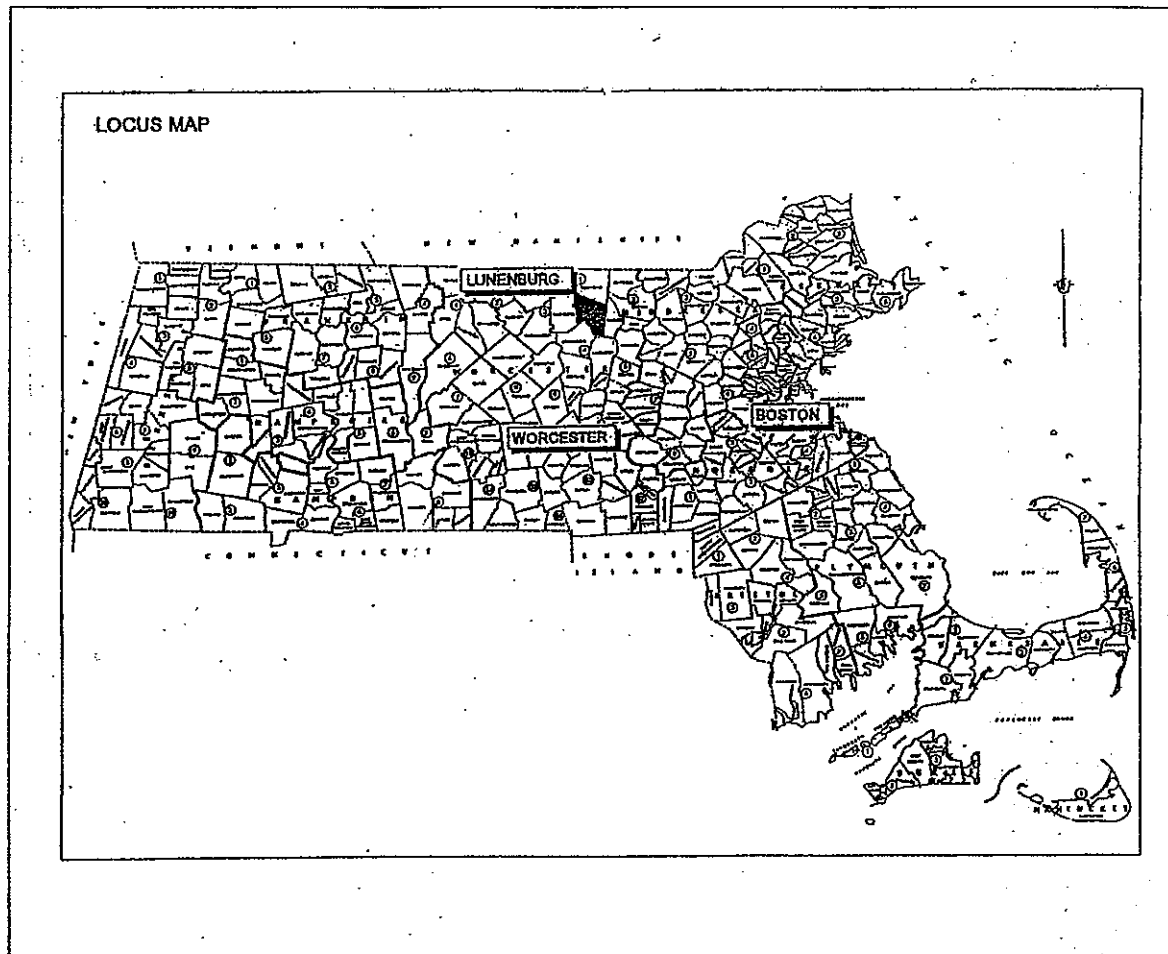
- ❖ Botanist/geneticist Luther Burbank, who began his work with potatoes in Lunenburg before moving to Lancaster and eventually California
- ❖ Robert Treat Paine, a signer of the Declaration of Independence
- ❖ Luther S. Cushing, author of *Cushing's Manual of Parliamentary Law*
- ❖ Massachusetts Governor George S. Boutwell

In 1848 the Charlestown–Gardner Railroad was completed; a small portion of track passed through Lunenburg. But because the track passed through the extreme southeast corner of Lunenburg, remote from the Town Center, it did not generate development and progress as it did in other towns with more central locations. The present day Town Hall, formerly the Third Unitarian Church building, was purchased by the Town and moved to its current location in the Town Center in 1865. The Fitchburg and Leominster Street Railway serviced the Town Center by electric car from 1901 through 1925, with track laid on Leominster Road, Massachusetts Ave (Rte. 2A), and Main Street.

The Massachusetts Historical Commission has only a single record of an Archaic Period stone axe, which lacks good locality data (but is recorded as being from the Lake Shirley area). It is implicit, however, that because of the Town's historic character and general physiology, there may be many undiscovered sites of historic and prehistoric significance. Riparian areas that were classically used as encampment areas by Archaic and Woodland period indigenous peoples also remain to be documented and evaluated.

## LUNENBURG LOCUS MAP

Map 5-1



## Population Characteristics

Lunenburg has experienced considerable growth. **Table 5-1** illustrates the Town's population growth since 1970, and projected growth through the year 2000. According to preliminary U.S. Census counts, the Town had a 1990 population of 9,117 in 3,486 dwelling units, an average household size of 2.6 persons, and an average density of approximately 332 persons per square mile.

**Population and Dwelling Units 1970 – 2000**

**Table 5-1**

Year	Population	Increase Over Previous Count		Number of Housing Units	Increase Over Previous Count	
		Number	Percent		Number	Percent
1979	7,419	NA	NA	2,532	NA	NA
1980	8,405	986	13.3%	3,133	601	23.7
1990	9,117	712	8.5%	3,486	353	11.3
2000	9,401 <sup>3</sup>	284	3.1%	3,668	182	5.2

Source: Massachusetts Municipal Profiles, Information Publications, California, 1991

**Table 5-2** shows the 1990 population by age. One quarter of the Town's population was under the age of 18 and approximately twelve percent (12%) were sixty-five (65) years of age or older.

**1990 Population by Age**

**Table 5-2**

Under 5 years	609
5 – 17 years	1699
18 – 64 years	5739
65 and over	1070

Source:

<sup>3</sup> U.S. Census 2001

Over eighty-four percent (84%) of the persons over twenty-five (25) years of age were high school graduates, and approximately one-quarter were college graduates. Approximately four percent (4%) of the Town's population were identified as having a mobility or self-care limitation.

The 1980 U.S. Census reported that the median family income was \$22,152, which was approximately thirteen percent (13%) higher than the median family income for the SMSA. In 1980, approximately sixty percent (60%) of workers residing in Lunenburg were employed as executives, administrators, managers, professional specialists, administrative support or clerical workers, or in precision production, craft and repair personnel. In 2000, the median family income increased to \$57,045 and the percent of workers employed as executives, administrators, managers, professional specialists, administrative support or clerical workers, or in precision production, craft and repair personnel increased to over two-thirds of the labor force.

The trend toward smaller households and an aging population indicates that the Town should plan to provide more recreation opportunities that appeal to middle aged and senior citizens. Such recreation might include more passive opportunities as well as active ones. The higher-than-average median family income indicates that Lunenburg residents may be better able than other families to afford to participate in a wide range of recreational activities and other activities outside the Town or region.

## **Growth and Development Patterns**

### **1. *Patterns and Trends***

Historically, Lunenburg grew from the agricultural base centered around Fitchburg; however, as the population of both the Town and the region increased, the area evolved from a rural to semi-rural in character. The Town still has a low-density, open feeling. Much of the Town is covered by farmland and other open and undeveloped land, providing beautiful scenic vistas and imparting to the Town an open charm. There is a total of fifteen hundred (1500) acres of agricultural land. Uses of low-density residential are scattered throughout the Town. Single-family homes on large lots are predominant, although there are a few large-scale low-density townhouse developments. Concentrations of residential use occur in the Town Center, in the Whalom area, and along Route 2A.

There are non-residential uses in the Town. Sand and gravel extractions are located primarily in the southwest. Commercial uses are located along Route 2A near the Fitchburg line, in the southeastern and southern portion of the Town, and in the Town center. These commercial uses are, for the

most part, convenience- and highway- business type uses, that is, automotive sales, variety stores, restaurants, and motels. Industrial uses are located in the south central part of the Town.

The Town has taken steps to preserve as much of its open and semi-rural character as possible; although suburbanization will continue, it will not occur at the pace it once did.

## 2. *Infrastructure*

### **Transportation System<sup>3</sup>**

Superhighway routes 2 and 190 provide regional access to the Town from the south, east and west. These highways connect Lunenburg to employment and shopping centers in the region, encouraging the Town's development as a bedroom community.

There are six miles of State roads in Town. Routes 2A and 13 provide access to and from surrounding communities, resulting in heavy commuter traffic through the Town and providing opportunities for businesses that cater to commuters.

Eighty-five miles of accepted Town roads provide access to the different parts of the community and vary from paved, well-travelled streets to unpaved, rolling roads. Commuter rail connections in Fitchburg link Lunenburg residents with employment and retail services in municipalities as far west as Gardner and as far east as Boston.

During the rapid increase in real estate prices in the 1980s, the regional transportation system made it possible for people seeking relatively low housing prices to locate in Lunenburg and commute to the employment centers along Routes 495 and 128 and in the cities of Worcester and Boston. The highway and commuter rail system has contributed in this way to the growth pressures that have faced the Town in the last decade.

### **Water**

The Lunenburg Water District, a quasi-public water supply agency separate from the Town government, provides water to residents and businesses in most, but not all, of the Town. Those residents and businesses outside the District rely on private on-site wells for water service. The District covers primarily the western and central portions of Lunenburg, although it has expanded with the growth in the community.

The District's water supply comes from a series of ground water wells that are off Lancaster Avenue. These wells are all located in the same aquifer, creating the potential for the loss of the Town's entire water supply should

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<sup>3</sup> See also *Circulation Element*.

the aquifer become contaminated. The Town and District recognize the potential threat to the water supply and have commissioned studies. The studies have identified potential well sites and acquired one well site at Hickory Hills Lake.

The Town has adopted a water supply protection bylaw as part of its zoning bylaw. The bylaw serves to guard not only the well sites and potential well sites, but also the aquifer in which the well sites are located and the drainage area in which the aquifer is located. The water supply protection bylaw has recently been revised in order to provide further protection for the Town's limited water supply.

Because the Town relies on groundwater from a single aquifer for its water supply, population density and potentially hazardous land uses must be controlled in order to avoid degradation of water quality and to minimize the health threat to the residents of Lunenburg.

### **Sewer**

The Town has limited public sewer service, and most development in Town is served by on-site sewage disposal. Much of the land in Town is not well suited for development, however. Clay, ledge, and poor soil drainage limit siting opportunities.

In recent years the Town of Lunenburg has negotiated a connection to the sewer system of Fitchburg. This system, originally conceived as a regional one, is designed to accommodate Lunenburg. The service is provided along Route 2A from Fitchburg to Chase Road. This sewer connection offers relatively efficient removal and treatment at the Fitchburg sewage plant. Additional service connecting with neighbors is in the study stage.

This system removes the potential for groundwater contamination of poorly located sewage disposal systems that would be on site. It also removes opportunities for groundwater recharge, however. An sewage disposal system built on-site, properly located and maintained, can effectively treat domestic effluent prior to contact with the water table. The treated liquid then recharges the groundwater system.

Connection to the Fitchburg sewer system stimulates more intensive land development than would otherwise be possible. This sewer connection can promote the development of marginal lands or land that would not normally be considered for development. Lands with poor soils that are too wet for on-site sewage disposal can be developed more readily when provided with sewer connections. This development not only threatens the Town's open character, but can also be a negative impact on natural resources such as wetlands, streams, and wooded areas.

### 3. Long Term Development Patterns

The Town has adopted land use controls to manage growth. These controls include zoning bylaws, subdivision regulations, a wetland protection bylaw, and sanitation guidelines. The Protective Zoning Bylaw provides for three residential districts, a mixed residential/business district, two commercial districts, and an office park/industrial district. See **Map 5-2** on the following page, and **Table 5-3**, below.

#### Zoning Districts in Lunenburg

**Table 5-3**

<b>Residence A</b>	<b>Limited Business/Residential</b>
<b>Residence B</b>	<b>Retail Comercial</b>
<b>Outlying</b>	<b>Office Park and Industrial</b>
<b>Recreation</b>	<b>Flood Plain</b>
<b>Commercial</b>	<b>Water Supply Protection*</b>

**\*Overlay district**

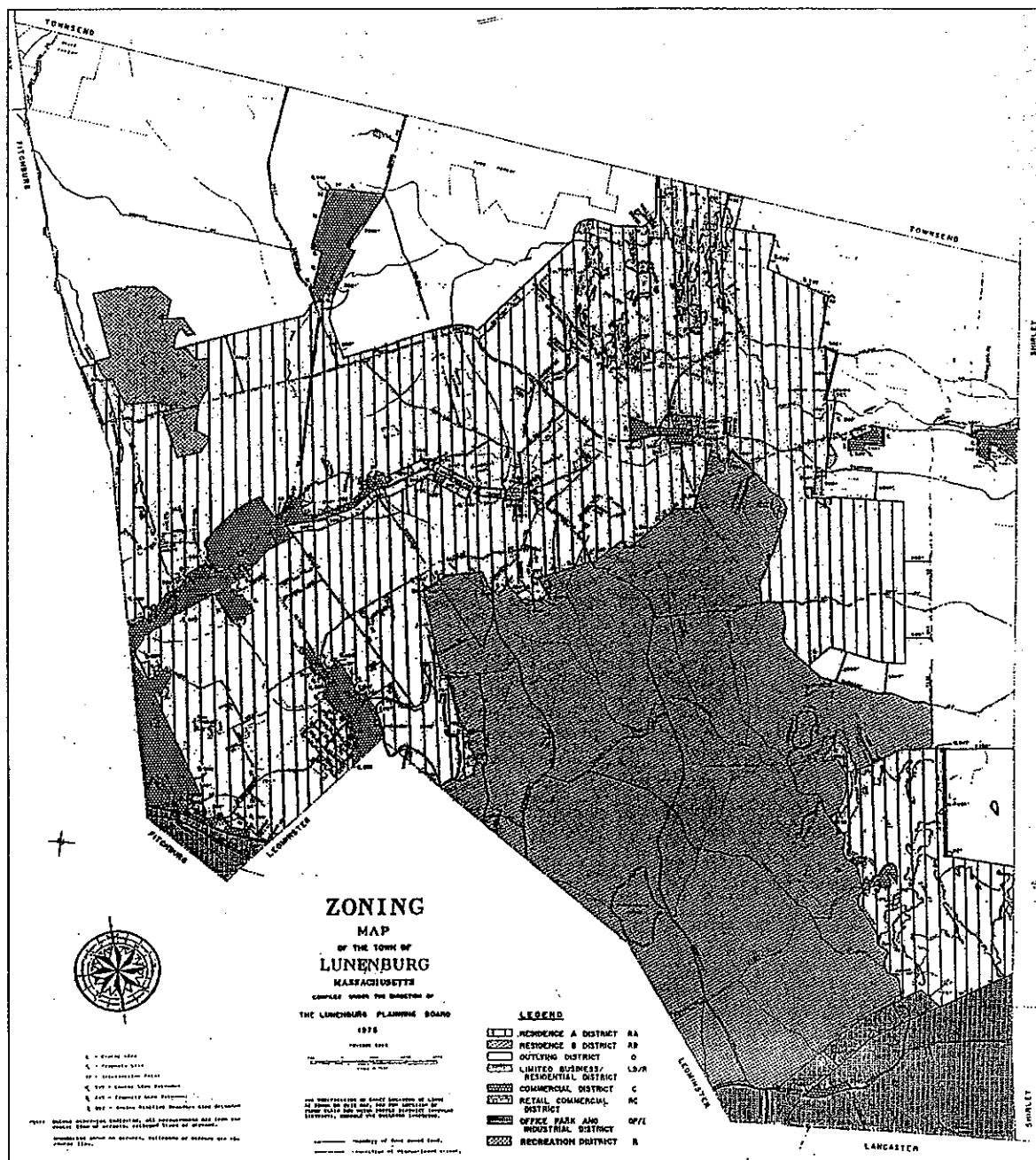
In addition, the Zoning Bylaw allows for development of a Planned Residential Area, which permits a developer to construct multi-family units and still preserve open space and natural features.

The 1989 population of eighty-five hundred persons required only 34 acres. The *1989 Growth Management Plan* indicated that, at build-out under existing zoning, the almost thirteen thousand (13,000) acres of buildable land could have over eight thousand lots, with as many as twenty-seven thousand residents. Based on this build-out population, 108 acres would be needed for recreation. The current build-out figure is for almost six thousand and three hundred (6,300) dwelling units and almost seventeen thousand (17,000) persons. Since the 1989 Plan, because of a zoning change on Route 2A, there has been a small reduction in build-out population and a corresponding small reduction in increased needs for recreation areas. Little recreation land has been added in the last ten years.



# LUNENBURG ZONING DISTRICTS

Map 5-2



New residential building has been occurring at a modest but steady rate (under fifty dwelling units a year). This development occurs on currently undeveloped and open land, which will affect visual character and rural/small town ambience of the Lunenburg of the future. The Planning Board monitors previously reviewed and approved subdivision plans and regularly has several new plans being presented. Planned and approved development in Lunenburg will increase demand for recreation. Some recreation areas, however, may be accommodated as part of the site, especially in planned residential areas.

#### **4. Conservation and Municipally Owned Lands**

The 1985 *Conservation Recreation Plan* indicated that approximately forty percent (40%) of Lunenburg was forested, primarily with white pines, oak, maple, hemlock and birch trees. The Town maintains several large parcels of this forestland. The Town has taken steps to reduce the loss of forested lands. The Zoning Bylaw includes a number of provisions enabling maintenance of as much of the land in its natural state as is feasible, thereby preserving resources. These provisions include

- Planned Developments
- A Water Supply Protection District
- A regulation determining maximum land coverage

In addition, subdivision regulations call for re-vegetation to prevent erosion of cleared areas, planting of street trees, and retention of natural vegetation on the site wherever possible.

## **Environmental Inventory and Analysis**

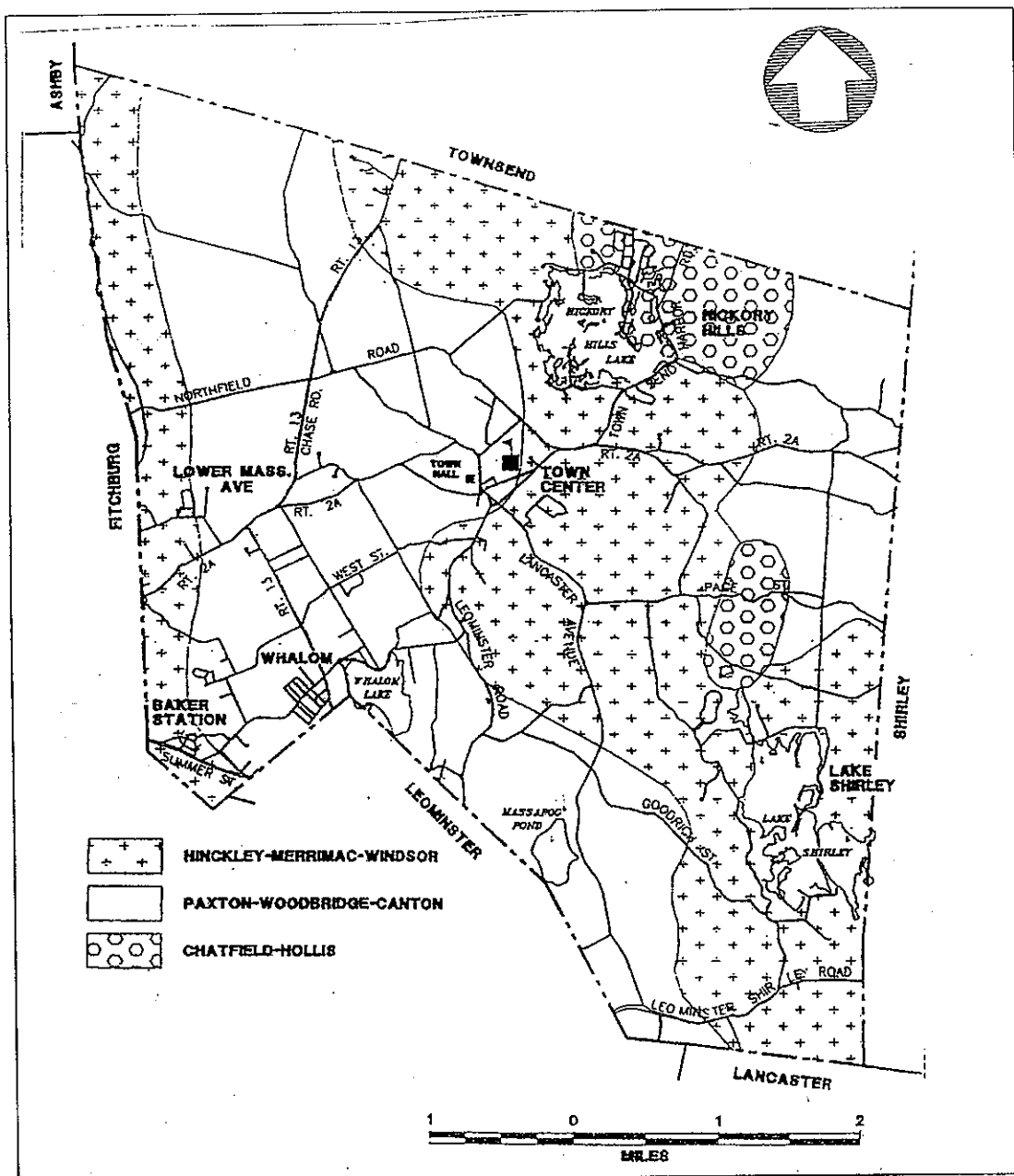
### **1. Topography, Geology, and Soils**

The topography of the Town is a result of the glacial action that spread over much of North America in several repeated waves in the geologic past. The rolling hills, kettles, kames, eskers, moraines, outwash plain, ponds and wet areas are remnants of the retreat of the last glacial ice flow that began approximately ten thousand years ago. Unique boulder rock formations, referred to locally as Table Rock and Diamond Rock, provide opportunities for appreciation of the randomness of nature. Whalom Pond and Massapoag Pond are glacially carved depressions that filled with water. Larger water bodies include Hickory Hills Lake in the northeast part of the Town and Lake Shirley in the east central section, at the Lunenburg/Shirley Town line.

**Map 5-3** on the following page shows the locations of the three main soils groupings in Lunenburg.

## LUNENBURG SOILS

Map 5-3



According to the *Soil Conservation Service Soil Survey*,<sup>4</sup> soils formed in water-sorted deposits of glacial outwash. The Hinckley-Merrimac-Windsor soil type covers much of Town. Hinckley soils are generally deep and level and have rapid- to very-rapid permeability. Merrimac soils are level to moderately steep, and have moderate-to-rapid permeability. Windsor soils are generally sandy, range from nearly level to moderately steep, and have rapid to very rapid permeability.

The *Paxton-Woodbridge-Canton soil group* is formed in glacial till. It covers much of the central and northeastern parts of the Town. Paxton soils are gently sloping to steep and have slow to very slow permeability. Woodbridge soil is nearly level to sloping, with slow to very slow permeability, and is often found on the top of hills and drumlins. Canton soils are gently sloping to steep and have moderately rapid to rapid-permeability.

Like the previous soil group, the *Chatfield-Hollis soil* is formed in glacial till. It is found in two areas of Lunenburg -one north of Hickory Hills Lake and the other just north of Lake Shirley. The individual soils in this group both have moderate to moderately-rapid permeability. Chatfield soils are found on the lower slopes of ridges and Hollis soils are found on the upper slopes.

Corn, crops, apples and dairy products are produced in Lunenburg, but none of the soils are considered significant agricultural soils. The same soil types are found throughout the County.

The topographic, geologic and soil characteristics of Lunenburg are not conducive to dense urban development unless there is considerable expenditure for infrastructure. The rolling topography does not provide much level land for development of large industrial plants or commercial structures, and poor drainage and low permeability characteristics of much of the soil do not provide for the siting of high-density residential structures.

The geologic features do provide some development opportunities. The glacial topography is conducive to sand and gravel mining, and there is such an operation, in the southern portion of the Town, by the Leominster and Lancaster Town lines.

The topographical features provide for some recreation. The many ponds in Town provide for various activities that include boating, swimming, fishing, ice-skating, and nature study. The rolling topography provides for hiking, sledding, and skiing, while the more level areas in Town provide golfing, baseball and other field games.

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<sup>4</sup> Soil Conservation Service, *Soil Survey of Worcester County, Massachusetts: Northern Part*. U.S. Department of Agriculture, December 1985.

Wetland areas, located throughout town, provide recreational opportunities such as trapping, hunting, and fishing, and are valuable habitat for wildlife, for watershed storage, and flood control.

## **2. Landscape Character**

Although located in an urban area, the Town of Lunenburg maintains a small town semi-rural character. Its green rolling hills, ponds, wetlands, and vegetated areas contribute to the pastoral sense that is easily felt driving through much of the Town. The large tracts of State and Town forests and conservation areas and land that is in agricultural use or devoted to raising animals contribute to the undeveloped and semi-rural ambiance of the Town. Narrow, winding, tree-lined and sometimes unpaved roads enhance the semi-rural character.

The rolling topography provides the Town with scenic views across hills and valleys and over farm and pasture land. This is especially true along Lancaster Avenue as one travels to and from the Town Center to Route 2. The scenic vistas along this stretch of roadway from the crests of hills are especially beautiful in the Fall. Views across the many ponds and wetland areas also impart quality vistas to the natural landscape.

The landscape features of the Town provide an opportunity for recreation. The forests provide areas for hiking, cross country skiing, nature study and hunting. The lakes and wetlands provide boating, swimming, ice skating, and nature study.

The man-made landscape is also important to the Town. The village-type development and historic structures such as the Town Hall give the Town a traditional New England appearance, instilling a sense of permanency and stability to the built environment.

Development has affected the character of the Town. Several outside forces, however, have fostered the intensity and type of pressure on development. The Fitchburg area, once dependent upon employment in slow-growth industries, diversified to more rapid-growth industries. Major transportation routes to the area were improved, making it easier for people to live in Lunenburg and commute to work in the major employment centers across eastern Massachusetts and southern New Hampshire. When housing prices in the metropolitan Boston area first began their rapid rise, housing prices in Lunenburg increased at a lower rate, making the Town attractive to homebuyers who were seeking quality housing in a small town setting.

Changes outside the Town resulted in an increase in both residential development and proposals for development. Several large-scale housing

developments followed one after another. Commercial development pressure also increased, and large areas of undeveloped land were rezoned and cleared for commercial use.

The development activity was slowed only by the downturn in the real estate market and the recession in the early nineties. The activity has continued to leave its mark, however. Commercial development has increased along major arteries, such as Route 2A, and traffic congestion has increased. Due to disruption of habitats for wildlife, there have been more conflicts between wild animals and residents of the Town. Domestic pets have harassed wildlife: free running dogs have crippled and killed white tail deer, including pregnant deer.

The natural and built landscape has suffered as well. Development has taken place in prime locations, affecting some of the scenic views. A large residential development has been built on the shore of Hickory Hills Lake, impacting upon the view along the Lake and affecting the Lake's recreational use. Commercial development and its associated signage along Route 2A has increased. The Town's population has increased, resulting in an increase in the demand for recreation. An increase in population that is associated with development will heighten demand for recreation, possibly requiring both acquisition of more land for recreation use and construction of more recreation facilities. If development continues at the present pace, Lunenburg will see significant loss of green space and a change from its small town character to a suburban one.

### 3. Water Resources

#### *Surface Water*

The Town has a number of streams, ponds and lakes within its boundaries. Surface water bodies account for 2.37 of the Town's twenty-nine square mile of total area. **Map 5-4**, on page 20, shows the location of lakes, streams, wetlands and major aquifers. Of the four large lakes in Lunenburg, the two largest, Lake Shirley and Hickory Hills Lake, are man-made.<sup>5</sup>

*Lake Shirley*, located in the southeastern portion of Town, covers 366 acres and has an average depth of twenty-eight feet. There is no public access to this lake; it is used for recreation by private organizations on its shores. Water quality tests indicate that the water is suitable for swimming. Lack of public access to Lake Shirley limits it as a resource for public recreation.

<sup>5</sup> A detailed analysis of the water is on file in the office of the Planning Board.

*Hickory Hills Lake* is located in north central Lunenburg. The approximately 331-acre Lake is owned and maintained by Hickory Hills Landowners, Inc., and is used by residents abutting the water for recreation. There is no public access to Hickory Hills Lake. Its average depth is ten feet and its maximum depth is twenty feet. The water quality is suitable for swimming. Like Lake Shirley, the lack of public access limits use of water by the public.

*Massapoag Pond* is located in south central Lunenburg near the Leominster border. This fifty-six (56) acre pond is man-made and privately owned; there is no public access. Again, the lack of public access precludes its use for public recreation purposes.

*Lake Whalom*, ninety-nine (99) acres, is used for recreational purposes, including boating and swimming. Located in the southwestern portion of Town on the Leominster border, Lake Whalom is owned by the Commonwealth of Massachusetts. The Lunenburg Town Beach also provides access for Lunenburg residents, and another public access is by boat ramp in Leominster. The waters test as acceptable for swimming. Fitchburg Skin Diver Club frequently uses Lake Whalom for its programs.

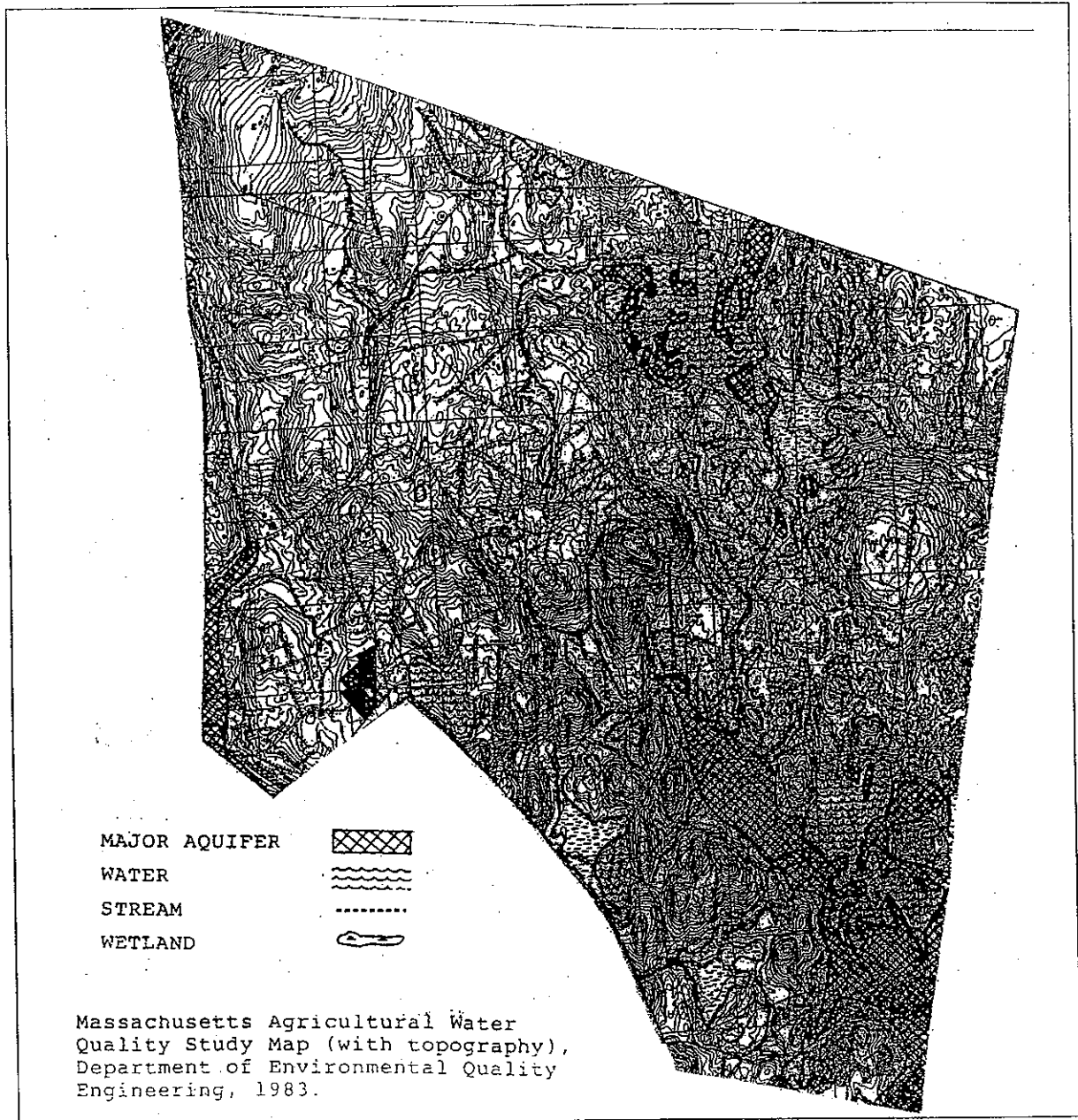
Numerous streams, ranging from small flows to larger streams draining into wetlands and ponds, flow through and within the Town, including Mulpus, Pearl Hill and Catacoonamug Brooks. These brooks are too small for active recreation.

#### *Ground Water Sources*

The Lunenburg Water District has performed test borings throughout much of the Town to locate potential sources of groundwater. The tests indicate that the most suitable sites for exploitation are located in an area of deep stratified drift deposits bounded by Lancaster Avenue, Shirley-Leominster Road, Burrage Street, and Page Street. The District's wells are already located in this area and steps have been taken to protect the area as a natural resource because of its groundwater.

#### *Flood Hazard Areas*

The 1981 *Federal Emergency Management Agency (FEMA) Flood Insurance Study* of the Town of Lunenburg identified local flood hazard areas. The Study indicated that low-lying areas of the Town are subject to periodic flooding from Baker Brook, Pearl Hill Brook, Mulpus Brook, Catacoonamug Brook, Lake Shirley, and Lake Whalom. The FEMA maps indicate areas of flood hazards, identified as that area within Zone A on the Floodway Boundary Map and on the Floodway Map of the Town of Lunenburg prepared by the Federal Emergency Management Agency. These maps are on file in the office of the Planning Board and in the office of the Building Inspector.

**WATER RESOURCES IN LUNENBURG****Map 5-4**



The Town has taken steps to minimize encroachment of development in the floodplain and the subsequent flood damage to life and property by adopting a Flood Plain District as part of the Zoning Bylaw, and has prohibited encroachments in the District that would increase flood levels during a one hundred year flood. The Town has permitted limited uses in the Floodplain District, those of low-intensity and low-impact, such as agriculture, nursery, outdoor recreation, plants and wildlife, and forestry.

#### *Wetlands*

Lunenburg has large areas of wetlands. These areas are shown on the Water Resources **Map 5-4**, page 20. Wetlands are valuable because they provide natural drainage and flood control, groundwater recharge, natural water purification, wildlife habitat, and enjoyment of nature in the form of recreational opportunities.

Much of the wetlands in the Town are on private ownership land and are subject to development within the perimeters of the *Wetlands Protection Act*. Historically, land developers avoided wetland areas because of the cost of development on such land; however, as the more easily developed land has been built upon and land development engineering practice has advanced, developers have turned to construction on marginal lands to meet residential, commercial and industrial demands. The Lunenburg Conservation Commission, as part of its authority under the Wetlands Protection Act and the Town of Lunenburg Wetlands Protection Bylaw, reviews proposed development and, if development is allowed, the Commission issues mitigation measures for work within these wetlands and associated wetland resource areas.

#### *Aquifer Recharge Areas*

The Town of Lunenburg is served by the Lunenburg Water District, an entity created in 1939 by an act of the Great and General Court to be independent of the Town. The Water District covers approximately two thirds of the Town and supplies potable water from four groundwater wells located off Lancaster Avenue. The wells have a combined pumping capacity of 1.31 million gallons daily. The Water District has mapped the well sites, aquifer and recharge areas for the wells. For a detailed illustration of the aquifer and recharge area boundaries, please refer to the *Land Acquisition Application* map dated 1983, on file with the Lunenburg Planning Board and the Lunenburg Water District.

The wells of the Water District are all in the same shallow aquifer, creating potential loss of service should the aquifer become contaminated or overpumped. The Town recognizes the critical need to protect its aquifer, and has adopted a Water Supply Protection District as part of its Zoning Bylaw. The Bylaw establishes three levels of protective resource areas within the recharge area.

### *Aquifer Recharge Area Zones*

**Zone 1:** Restricted Area, generally the area within four hundred feet of the well site. Uses within Zone 1 are limited to conservation uses, outdoor recreation, and agriculture.

**Zone 2:** The aquifer itself. Uses permitted in Zone 2 include those permitted in Zone 1 plus low density detached dwellings and public utilities/facilities.

**Zone 3:** The upland area that directly recharges the aquifer. Uses in this zone are not as restrictive as the previous areas; however, pesticide application and runoff are controlled in order to limit the impact on the aquifer. In addition to the permitted uses, performance standards and prohibited uses are included in the Bylaw. It should be noted that part of Zone 3 of the recharge area extends into Leominster and is therefore not in the control of the Town of Lunenburg.

Because the aquifer covers a large portion of the Town, it affects all land development in the community. Recreation use within the area is also affected by the restrictions. Strong regulations are required, however, in order to assure a safe drinking water supply for the Town residents.

## **4. Environmental Problems**

Lunenburg's environmental problems have been addressed in the *Growth Management/Strategic Plan*. They primarily address the lakes and vehicle traffic.

## **5. Wildlife and Fisheries**

The varied development pattern of the Town offers differing habitats for wild life. Land used for agriculture generally supports birds and rodents, and forested land supports a large variety of animal life, from snakes and birds to large mammals. Lakes and streams support fish and other aquatic life, and wetlands offer broad habitat for birds, amphibians, and mammals. According to the 1985 Recreation Conservation Plan, the inventory of animals in Lunenburg includes deer, foxes, fish, raccoons, mink, muskrats, beavers, otters, skunks, great blue herons, Canadian geese, ducks, owls, hawks, and pheasants.

### *Rare, Threatened And Endangered Species*

The Commonwealth has not identified endangered species or areas of Critical Environmental Concern in Lunenburg. The Town is fortunate to still have a wide variety of habitats supporting a diversity of wildlife and

plants. The Town has preserved more of its open fields and farmlands than some surrounding communities, and both upland and forest abound. The marshes of the Mulpus Brook and the open water habitat of Lunenburg's lakes and ponds add to its diverse habitats. The Town contains certified vernal pools scattered throughout the community, and these contain a number of rare species protected under the Commonwealth of Massachusetts Endangered Species Act. To protect them, the particular species of flora and fauna and their exact locations are not listed.

Several of the species listed by the Massachusetts Division of Fisheries and Wildlife (MDFW) *Natural Heritage and Endangered Species Program* (MNDESP) and known to occur in Lunenburg have not been observed since the 1970's. Often rare species are obscure and will not be observed unless actively searched out. Potential habitat for these species could be evaluated. Vernal pools in particular may turn up additional rare species. Many of the state-listed species that occur in Lunenburg require the open habitat of fields.

In particular, the stretch of Mulpus Brook from Hickory Hills Lake to the Shirley border is an important resource for wildlife. The area around Hickory Hills Lake supports many of the Town's rare species. The Natural Heritage and Endangered Species Program recommends focusing on protection of this area as well as the North Cemetery wetland area, which also supports rare species habitat. Maintaining normal water level fluctuations in wetlands and connections between open space resources are vital to maintaining the habitat as well as the water quality. Removal of non-native species is another important requirement to maintain a hospitable habitat for rare species. Regional coordination should protect linked corridors.

As development increases in Lunenburg and its neighboring towns, habitats are deduced and wildlife has been observed increasingly frequently in the less developed and residential areas. Connected corridors, to facilitate travel and migration, and therefore the maintenance of flora and fauna, are necessary.

## 6. Vegetation

### *Forest Land*

Forest land is a valuable resource. In general, forested land provides the following attributes to any community:

- ❖ *Wildlife habitat.* Forested land provides living space and food for a variety of animals, including squirrels and other rodents, birds, deer, and moose.

- ❖ *Wind breaks.* Trees act as wind breaks, minimizing the eroding effect of breezes and the potential harmful effect of strong winds on natural and man-made features.
- ❖ *Pollution mitigation.* Trees cleanse the air during the photosynthesis process by consuming nitrogen and releasing oxygen.
- ❖ *Greenery.* Trees provide a respite from the urban landscape, relieving the monotony of paved areas and residential development.
- ❖ *Recreation.* Forested land provides hunting, hiking, cross country skiing, horseback riding, and nature study.
- ❖ *Character.* Forested land can establish or add to the ambience of a community.
- ❖ *Soil stabilization.* Vegetation reduces soil erosion caused by wind and water.

The 1985 *Conservation Recreation Plan* indicated that approximately forty percent (40%) of the Town was forested, primarily with white pines, oak, maple, hemlock and birch trees. Approximately 1,600 acres of land in Lunenburg is designated as conservation land. The Town maintains several large parcels of forest land, located on the inventory **Map 5-5** on page 27. The Town practices forestry management. Selected clearing is allowed to stimulate the growth of existing trees and to foster new growth of a variety of tree species, and to provide income to the Town.

Because the increase in Town development in the second half of the 1980s, the amount of privately-owned forested land in has decreased. It is not possible to guarantee that forested land will remain undeveloped unless it is in public ownership or placed under development restrictions. As previously indicated, because of a shortage of easily developed land, builders are turning to land that was once considered uneconomical for construction. The cost of clearing heavily forested land has forced some developers to overlook such land in favor of already cleared areas. Until relatively recently, land development practice generally resulted in the clearing of forested areas to allow for access by heavy construction machinery. This, in turn, resulted not only in the loss of the forest itself, but in turn the loss of wildlife associated with the forest.

The Town of Lunenburg has taken steps to reduce loss of forested land. A planned residential area bylaw was adopted to allow for development that maintains as much of the land in its natural state as is feasible. Provisions included planned developments, a Water Supply Protection District, and a maximum land coverage regulation. In addition, the Town's subdivision regulations call for re-vegetation of cleared areas, planting of street trees, and the retaining of the natural vegetation on a site wherever possible.

Lunenburg was once a farming community. Agriculture is still an important part of the Town's economy, with approximately five percent of the land engaged in farm-related activities.<sup>6</sup> The Town retains an open character, with pastureland, productive farm fields and orchards heavily contributing to the semi-rural ambiance of the Town. Approximately two-fifths of the Town remains in forest. Over 1,200 acres are devoted to sand and gravel removal.

## Open Space and Recreation

The Town has a current Open Space and Recreation Plan. It is incorporated in the Master Plan by reference, and the summary is included in this report.

### *Lands of Conservation and Recreation Interests*

Lunenburg has considerable conservation land because of the foresight of previous citizens, especially in establishing the Town Forest, but it lacks adequate recreation facilities to serve the anticipated population at full build-out.

#### *Private Open Space*

There are a number of significant parcels of privately owned land in Lunenburg. They range from individual home sites and waterfront property to the larger remaining farms (the Stillman farm, for example) the Maplewood Golf Course, the undeveloped Levine land, the land in the Northfield Woods development, and other parcels that are now being considered for development.

#### *Public/Non-Profit Parcels*

Public parcels over five (5) acres are listed on Table 5-4 on the next page and Public/Non-Profit land parcels are listed on Table 5-5 on page 28.

One highly significant non-profit parcel is the Henry E. Cowdrey Nature Center. This two hundred and eighty (280) acre area has many trails where hunting and trapping are not allowed. Douglas Fleming<sup>7</sup> has described it:

There is a wide variety of wildlife in the swampland, the forest, sand hills and Mulpus Brook area.

<sup>6</sup> Lunenburg Conservation Commission and Lunenburg Parks Department, *Conservation Recreation Plan*, Town of Lunenburg, 1985, page 2.

<sup>7</sup> *Trails of the Henry E. Cowdrey Nature Center*, Harley Edition, Douglas S. Fleming, Lunenburg Conservation Commission, 1980.

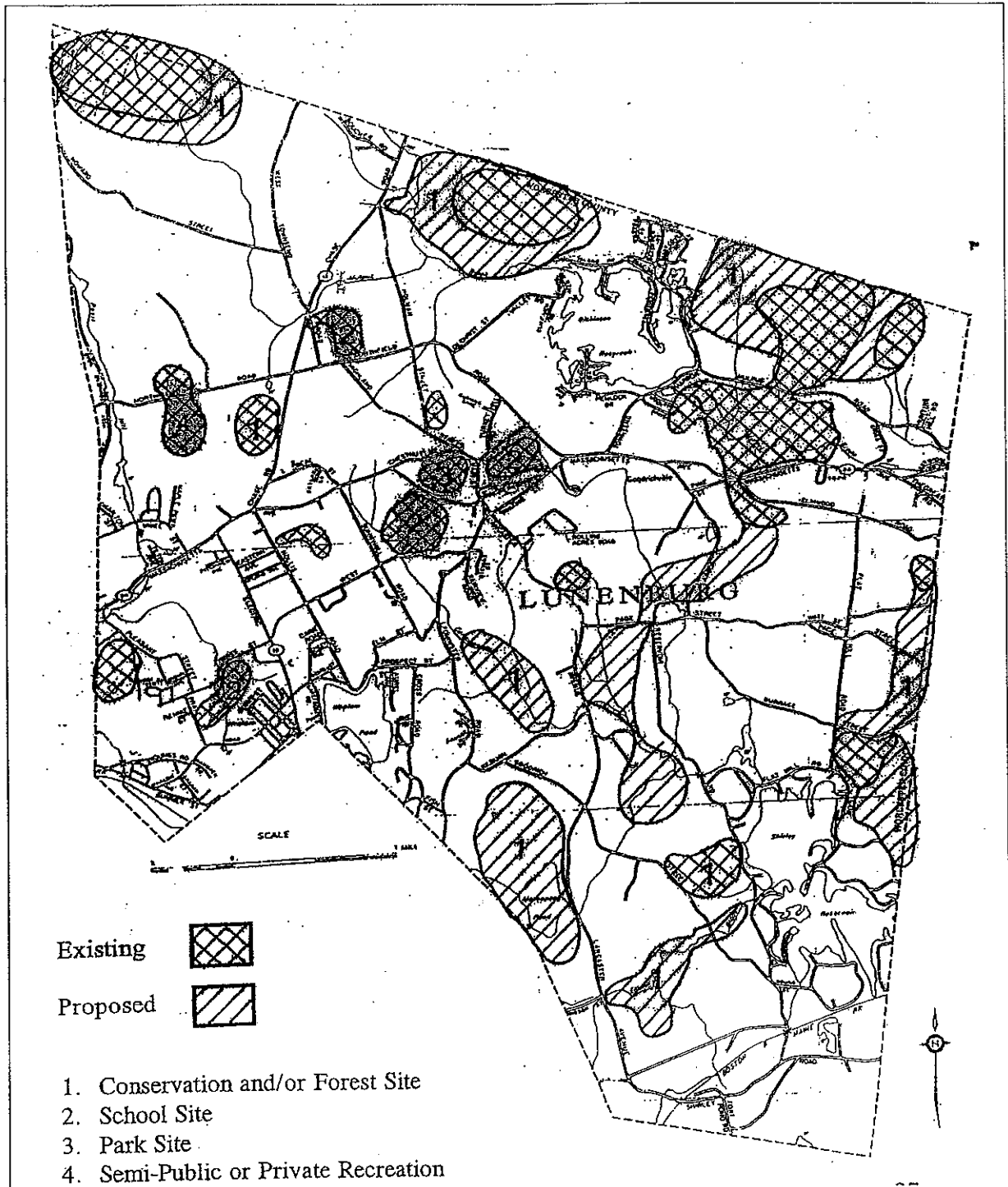
**TOWN AND STATE OWNED LANDS OVER 5 ACRES****Table 5-4**

<b>Owner/Type of Land</b>	<b>Location</b>	<b>Acreage</b>
<b>Town/Conservation Land</b>	NW Townsend Road	180.00
	Howard Street	15.00
	West Townsend Road	35.00
	Chase Road	267.39
	Townsend Harbor Road	44.50
	Northfield Road	20.00
	Mulpus Road	215.24
	Mulpus Road	66.50
	Chase Road	36.38
	Massachusetts Avenue	283.98
	Elmwood Road	24.25
	Leominster Road	9.04
	Burrage Street	74.00
	Reservoir Road	72.50
	Page Street	7.50
	Page Street	29.49
	Pleasant Street	78.84
	Lancaster Avenue	17.00
<b>Other Municipal Land</b>	School Department/Mass Avenue	45.66
	School Department/Chestnut Avenue	27.06
	School Department/West Street	66.57
	Cemetery Department/Holman Street	21.03
	Highway Department/Chase Road	7.85
	Housing Authority/White Street	6.50
	Lake Shirley	366.00
<b>State Land</b>	Whalom Lake	99.00
<b>State Land (Conservation)</b>	Townsend Road	127.48

Source: Town of Lunenburg

## OPEN SPACE, RECREATION AND CONSERVATION LAND

Map 5-5



## PUBLIC/NON-PROFIT LAND PARCELS

Table 5-5

Northfield Association Inc	325 acres	Picnicking, pool swimming
Town Forest	121 acres	Bicycling, cross country skiing, fresh water fishing, hiking, horseback riding, nature observing, picnicking, snowmobiling
Maplewood Real Trust	99 acres	Cross country skiing, golf, hiking, nature observing
W. Leo Rod and Gun Club	55 acres	ATV motoring, bicycling, cross country skiing, fresh water fishing, hiking, horseback riding, nature observing, picnicking, snowmobiling, target archery
Whalom Amusement Park Co.	38 acres	Bicycling, boating-non motor, fresh water fishing, fresh water swimming, golf, hiking, ice skating, motor boating, picnicking
Marshall Park	26 acres	Baseball/softball, bicycling, cross country skiing, hiking, nature observing, picnicking, tennis, walking/jogging
Passios Elementary School	25 acres	Baseball/softball, bicycling, football/soccer, general play, hiking, nature observing, snowmobiling

*Scenic Landscapes*

The Town's semi-rural nature provides for some highly scenic views. The views of open fields, wooded areas and hilltops from Lancaster Avenue have been mentioned earlier. Also important to the character of the Town are its scenic tree-lined roadways. Refer to "Landscape Characteristics" on page 17.



## STANDARDS FOR RECREATIONAL ACTIVITIES

Table 5-6

Type of Recreational Activity	Required to Meet Standard			
	Existing Public Facility in Lunenburg	1990 Population (9,117)	2000 Population (9,401)	Required at Full Build-Out (22,381)
<b>Active Recreation</b>				
Children's Play Area (with equipment)	9 acres	4.56 acres	4.75 acres	11.19 acres
Field Play Areas for Young Children	9 acres	13.68 acres	14.10 acres	33.57 acres
Older Children/Adult Field Sports Activities	22 acres	13.68 acres	14.10 acres	33.57 acres
Tennis/Outdoor Basketball and other Court Sports	6 courts/ Tennis only	1.82 acres	1.88 acres	4.47 acres
Swimming	1 beach	1 pool	1 pool	1 pool
Major Boating Activities	Lake Area	1.82 acres		
Hiking/Camping/Horseback Riding/Nature Study	280 acres	91.12 acres	94.01 acres	223.81 acres
Golfing	9 holes	9 holes	9 holes	9 holes
<b>Passive Recreation</b>				
Picnicking	Private areas	36.47 acres	37.60 acres	89.52 acres
Passive Water Sports Fishing/Rowing/Canoeing	Lake Areas	1 lake	1 lake	1 lake
Zoos, Arboretums, Botanical Gardens	None	9.12 acres	9.40 acres	22.38 acres
<b>Other</b>				
Parking at Recreational Areas	Unmeasured	9.12 acres	9.40 acres	22.38 acres
Indoor Recreation Centers	School Gyms	.91 acres	9.40 acres	22.38 acres
Outdoor Theaters, Band Shells	One	.36 acres	.37 acres	.89 acres
Playgrounds	At the Schools	13.68 acres	14.10 acres	33.57 acres
Neighborhood Parks	One	18.23 acres	18.80 acres	44.76 acres
Playfields	At the Schools	13.68 acres	14.10 acres	33.57 acres
Community Parks	26 acres (Marshall Park)	31.91 acres	32.90 acres	78.33 acres
District Parks	None	18.23 acres	18.80 acres	44.76 acres
Regional Parks and Reservations	Does not need to be in Lunenburg			

STANDARDS FOR RECREATIONAL ACTIVITIES<sup>8</sup>

Table 5-7

Standards for Recreational Activities			
Type of Recreational Activity	Space Requirements for Activity Per Population	Ideal Size of Space Required for Activity	
Active Recreation			
1. Children's Play Area (with equipment)	0.5 acre/1,000 pop.	1 acre	
2. Field Play Areas for Young Children	1.5 acres/1,000 pop.	3 acres	
3. Older Children-Adult Field Sports Activities	1.5 acres/1,000 pop.	15 acres	
4. Tennis-Outdoor Basketball Other Court Sports	1.0 acres/5,000 pop.	2 acres	
5. Swimming	1 outdoor pool/25,000	Competition size plus wading pool 2 acres	
6. Major Boating Activities	100 acres/50,000	100 acres and over	
7. Hiking-Camping-Horseback Riding-Nature Study	10 acres/1,000 pop.	500-1,000 acres	
8. Golfing	1-18 hole course per 50,000 pop.	120 acres	
Passive Recreation			
1. Picnicking	4 acres/1,000 pop.	varies	
2. Passive Water Sports Fishing-Rowing-Canoeing	1 Lake or Lagoon per 25,000 pop.	20 acre water area	
3. Zoos, Arboretums, Botanical Gardens	1 acre/1,000 pop.	100 acres	
Other*			
1. Parking at Recraaional Areas	1 acre/1,000 pop.	varies	
2. Indoor Recreation Centers	1 acre/10,000 pop.	1-2 acres	
3. Outdoor Theaters, Band Shells	1 acre/25,000 pop.	5 acres	
Standards for Recreation Areas			
Type of Area	Acres Per 1000 Population	Ideal Size of Site	Minimum
Playgrounds	1.5	4 acres	2 acres
Neighborhood Parks	2.0	10	5
Playfields	1.5	15	10
Community Parks	3.5	100	40
District Parks	2.0	200	100
Regional Parks and Reservations	15.0	500-1,000	varies

<sup>8</sup> Copied from Planning Design Criteria, De Chiara & Koppelman, Van Nostrand Reinhold Co., New York 1969

### ***Cultural And Historic Areas***

Lunenburg residents are fortunate to have access to many outstanding cultural opportunities, in addition to the local churches, library and Eagle House. These cultural facilities include:

- ❖ Famous historic sites in Massachusetts (Boston, Lexington, Concord and the nearby town of Harvard).
- ❖ Museums and theaters in the Worcester area and in Boston.
- ❖ Colleges, educational institutions, churches and hospitals in eastern Massachusetts, many of which are world famous. The colleges and medical facilities of Worcester are readily accessible as are the college in Fitchburg and the hospital in Concord.
- ❖ Library services and specialized libraries of many of the colleges in the region, augmented by the Town Library.

The proximity of the regional cultural facilities makes it impractical for the Town to try to duplicate facilities merely to have them within the Town boundary. Expansion and modernization of the library in the Town Center that is a focal point for Town residents is discussed in the *Municipal Services Element* of this Plan.

### ***Historic Lunenburg***

The Lunenburg Historical Commission has been active in the identification and documentation of historical resources in the community. The Town created the 102-acre Historic District that includes many of the building in the Town Center. The Commonwealth has been petitioned to include two historical cemeteries in the District.

The Town Center has approximately eighty (80) historically significant structures, including many structures from the late eighteenth to mid nineteenth centuries a period of major growth in the area. This first settlement dates from 1724. **Table 5-8** lists sites and structures found on the Historic District Map.

Lunenburg's Town center has a typically New England flavor. The Town Hall, local churches, and many locally important structures dominate the center. There is the need to preserve the integrity of the District from development that would detract from the unique architecture and character of the area.

**Other significant historic areas are**

- ❖ The station area on Summer Street, which was the center of early economic activity.
- ❖ The Whalom district, which was developed to supply housing for workers in Leominster and Fitchburg.

**STRUCTURES/SITES IN THE HISTORIC DISTRICTS****Table 5-8**

<b>Number</b>	<b>Name</b>	<b>Address</b>
1.	Bellows House	
2.	Putnam Store	Town Center
3.	Town Hall	17 Main Street
4.	Congregational Church	Town Center
5.	Jones House	42 Main Street
6.	Methodist Church	50 Main Street
7.	John Howard House	58 Main Street
8.	Wooldredge House	76 Main Street
9.	Locke House	94 Main Street
10.	Elwin Marshall House	91 Main Street
11.	Marshall Cottage	3 Oak Avenue
12.	Barney House	78 Oak Avenue
13.	Gilchrest House	13-15 Oak Avenue
14.	Town Pond	Highland Street
15.	Passios House	72 Highland Street
16.	1730 House	795 Mass Ave
17.	Hildreth House	876 Mass Ave.
18.	Jewett House	920 Mass Ave.
19.	Franklin S. Francis House	944 Mass. Ave.
20.	Susan Brown House	950 Mass. Ave.
21.	Ritter Memorial Library	960 Mass. Ave.
22.	Simon Heywood House	993 Mass. Ave.
23.	Brooks House	1033 Mass. Ave.
24.	Lane House	1091 Mass. Ave.
25.	A.K. Francis House	3 Lancaster Ave.
26.	Richardson House	19 Lancaster Ave.
27.	No. 1. School House	23 Lancaster Ave.
28.	Benjamin Whiting House	43 Lancaster Ave.
29.	William Harrington House	53 Lancaster Ave.
30.	Cushing House	73 Lancaster Ave.
31.	Elmdale House	125 Lancaster Ave.
32.	Cunningham House	86 Lancaster Ave.

33.	Bandstand	Lower Common
34.	Stone Watering Trough	Lower Common
35.	Clifton House	53 Whiting Street



## COMMUNITY FACILITIES AND SERVICES

In Envision 2007 the Town of Lunenburg articulated goals for Community Services, Facilities, Housing and Infrastructure. The goals identified relative to public facilities and services were:

1. plan and implement the enhancement and maintenance of municipal services
2. develop a community center concept
3. create a municipal financial development plan (see Implementation Element)
4. improve the Town road system (see Circulation Element)

The Town continued the envisioning process with several intergovernmental envisioning sessions with elected Boards and Committees and appointed Committees and Department Heads. The consensus reached in the goal entitled "plan and implement the enhancement and maintenance of municipal services" (see #1 above) in facilities planning priorities were as follows.

1. Sewers
2. Construction and renovation for School needs.
3. Expansion of Library and construction of a Public Safety Facility.
4. Construction and/or renovation for Town Administration needs.
5. Construction and/or expansion and/or renovation for Public Works, Park and Cemetery needs.

The above priorities have validation based on the following studies:

- Municipal Space Needs Study, Thomas Planning Service 1996-updated 1998
- Sewer Impact Study-Thomas Planning Service, 1995
- Wastewater Facilities Plan, Universal Engineering Corporation, 1998
- Sewer Master Plan, Universal Engineering Corporation, 1999
- Long Range School Facilities Master Plan, New England School Development Council, January 1999

In addition, other studies are as follows:

- School Feasibility and Building Committee, 1999 (NESDEC STUDY)\*
- Library Planning and Design, 1999
- In house Fire Department Need Study, 1983, updated 1998
- Capital Budgeting Planning, 1994-1999

\*New England School Development Council

## **MASTER PLAN RECOMMENDATIONS**

The Master Plan Recommendations are based on the Envision process, priorities of needs, and studies. However, the responsibility of the Planning Board is to clarify all factors in the Master Plan process. Therefore, due to the ever-changing State requirements and reimbursement formulas, the scope of proposed municipal buildings will be under constant State and Local reviews and analysis. Although the Planning Board supports meeting the needs of our Town, we must proceed with caution to insure the best solutions that both address the physical and economical factors.

### **ENVISION 2007 #1 – PLAN AND IMPLEMENT THE ENHANCEMENT AND MAINTENANCE OF MUNICIPAL SERVICES**

#### **1. SEWERS**

- A. Continue with the construction of sewers as outlined in the Sewer Master Plan based on the Sewer Feasibility Study.
  - Phase 1 A sewer line connection to City of Leominster from the Town Center, including schools, through the Whalom area including side streets along the designated route.
  - Phase 2 Baker Station and lower Massachusetts Avenue including side streets along the designated route.
  - Phase 3 Hickory Hill Area and Lake Shirley Area.
- B. Continue to update Inter-municipal agreements with the Cities of Fitchburg and Leominster as need is determined.
- C. Establish a line of communication with Devens Center through the Town of Shirley for possible connection to the proposed Devens Center Wastewater Treatment Facility.
- D. Promote the expansion of industrial facilities with the proposed extension of the sewer main to the industrial zoned area in Lunenburg.

#### **2. CONSTRUCTION AND RENOVATION FOR SCHOOL NEEDS**

- A. Continue within the framework of an officially appointed Building Committee to review and present a building project that is in keeping with the educational required specifications. All updated plans should consist of a review of the enrollment figures, general population growth and new housing development and include a review of the School Assistance Program regulations presently in place and monitor all proposed changes to the School Assistance criteria. Consideration should be given to Town owned land. A primary school was approved in 2000 in accordance with these policies.
- B. The NESDEC Report entitled School Feasibility and Building Committee, 1999 noted the following recommendation.



- a. Construct a new Pre-kindergarten through Primary School, grades 1 and 2.
- b. Close present Primary School on School Street.
- c. Update plan for addition/conversion Passios Elementary School for Grades 3-5.
- d. Update plan for renovation Turkey Hill Middle School for Grades 6-8.
- e. Update plan for addition/renovation to High School.

3. CONSTRUCTION OF PUBLIC SAFETY FACILITY

- A. Appoint a Committee for a new Public Safety Building on the selected site, on the west side of Route 2A.
- B. Determine a development concept and prepare architectural plans for construction of the new Public Safety building to include Police and Fire Department's personnel offices, dispatcher facility, police cells, rescue service and accompanying apparatus.
  - a. Appoint a Public Safety Building Committee
  - b. Construct the building
  - c. Approve and construct a Public Safety Building

4. EXPANSION OF LIBRARY

- A. Prepare architectural plans for a larger library encompassing compliance to Americans with Disabilities Act, reasonable State Standards, and parking needs, which will fit into the proposed Center Plan (see ENVISION #2 below)
  - a. Appoint a Library Building Committee
  - b. Construct library building or additions

5. CONSTRUCTION OR RENOVATION BUILDING FOR TOWN ADMINISTRATION NEEDS

- A. Study feasibility for renovation, with a financial analysis, of the possibility of vacating the primary school on School Street and/or consider other options.

6. CONSTRUCTION AND/OR EXPANSION AND/OR RENOVATION FOR PUBLIC WORKS, PARK AND CEMETERY NEEDS

Public Works Department

- A. Initiate a needs study for facility and land expansion for the Public Works Department to include adequate storage for existing and proposed large equipment needs of the department.
- B. Consider expanding the maintenance area on site to accommodate the expected increase associated with the maintenance of Town vehicles.

Park Department

- A. Continue three-year plan to renovate Town Beach building.
- B. Consider a new Park Department building in Marshall Park to replace existing facility on West Street. Facility may include offices, storage and space for active recreation activities.

Cemetery Department

- A. Continue to implement plans to expand North Cemetery.
- B. Develop plans to buffer South Cemetery.
- C. Select a site to be held in reserve for a new cemetery for use when the North Cemetery is full.
- D. Renovate Cemetery Building to include heating, insulation, in house plumbing, interior/exterior renovations or plan for a Cemetery/Park Department structure.

## **CENTER RECONSTRUCTION PLANNING**

### **ENVISION 2007 – DEVELOP A COMMUNITY CENTER CONCEPT**

Lunenburg Center creates a focal point for the Town, which establishes and identifies its character. Although it doesn't have a typical New England Common, a lower Common distinguishes it; this Common has a Gazebo, as a central location for summer band concerts. There is also a small green area in the immediate center adjacent to the four roadways crossing, which is distinguished as a common by the Town Seal.

The Center presently contains all the major public functions. Its broad scope contains the Schools, Church, Library, Town Offices, Police and Fire Stations, Senior Center, Post Office and Village Shops. Its architecture reflects the Town's Historical flavor.

The Center is overcrowded and needs revaluation. Many of the Town facilities located in the Center need new or expanded facilities to serve present and future population growth.

Schools need additional space to meet educational specifications.  
Present school buildings need interior upgrading and reconditioning.  
Present library is inadequate to comply with State standards. The proposed physical needs will require additional parking.  
Fire and Police Departments have outgrown the present facility and the present space will be needed to accommodate future expansion of the library and the probability of a proposed new use of the primary school.

Present Town Hall facilities are not adequate to house all departments with their space need requirements.

### CENTER PLANNING VISION

The Town center and nearby area must provide cultural, municipal and commercial services, which will be responsive to Envision 2007, and provide a community center that meets space needs as the Town grows. All Town Buildings should be available for programs, for all age group at all times of the year.

The construction of a new primary school building space at it's new location at Route 2A and Arbor Street will provide the necessary space needs to meet the current educational mandates and will offer the flexibility for different grade structure as need occurs.

A library expansion will offer many services to all age groups as basic library functions according to State standards and offer other cultural activities.

The relocation of the Fire and Police Services will assist in providing the space needed in the Center Plan to enhance the community center concept. The relocation will also assist in providing the Fire and Police services to function in a most efficient manner.

The Senior Center proximity allows the opportunity for seniors to walk to the Center's available services. Plans for the future availability of the full Eagle House in the Year 2003, (timetable for expiration of limited use by State Mandate) for meetings and programs should be instituted.

A larger structure to house government services by utilizing the old primary school will achieve meeting the needs of the public in a positive way. All land use departments housed together will provide a more efficient operation enabling a more structured permitting procedure. This will insure the Town of all encompassing review of projects and assist the citizens in their need of service.

The Commercial services such as the Post Office, retail and service stores, lends to the convenience of the Citizens.

### CENTER PLAN RECOMMENDATIONS

Construction of the new sewer system according to Phase 1 of the Master Sewer Facility Plan for Lunenburg. Review additional planned phases and prepare for implementation.

Construction of new Public Safety Building at the new site.

Remove the present Fire and Police Station.

Construction for a larger library space.

Develop adequate parking areas for all buildings.

#### OTHER CONSIDERATIONS FOR THE ENHANCEMENT OF THE TOWN CENTER

Consider a town or retail use for the present Town Hall if Town offices are sited at a new location, to preserve the present look of the center with its historic value.

Obtain an option or the "right of first refusal" at 2 Leominster Road, property adjacent to the Library, so that it can be acquired for potential expansion and/or parking needs in the future.

Consider an option or the right of first refusal" on the property at the intersection of Oak Avenue and Northfield Road and any other Oak Avenue property adjacent to school property to be held for future school needs.

Landscape and develop small pockets of open space for amenities for enhancement of a New England Town Center.

Consider the use of the house at 950 Massachusetts Avenue and/or the space it occupies if it is removed in accordance with any future building plans for the Town Center.

#### OTHER TOWN SERVICES

PUBLIC WORKS Consideration for new Public Works Department storage space for large equipment needs which will assist the Department in good maintenance of equipment.

PARK DEPARTMENT Consideration of Park Department's recreational facilities, which will enhance the quality of life in the Community.

CEMETERY Determine the amount of cemetery space that will be needed in the next twenty years. The present plans for expansion will partly realize that need, but a further site acquisition will guarantee fulfillment.

WATER The Lunenburg Water District, a quasi-public water supply agency separate from the Town government, provides water to forty-five percent of residences and businesses in Lunenburg. The original Water

District was laid out in 1930 and has been expanded to most of the western and central areas of the Town as well as Hickory Hills Lake. Residences and businesses outside the District rely on private wells. The District water supply comes from a series of groundwater wells located off of Lancaster Avenue and a well on Hickory Hills Lake that was installed and activated in 1995. The latter was established to distribute the water from two distinct aquifers.

Formerly, the Lancaster Avenue wells drew from the same aquifers and the Town was therefore subject to a loss of its entire water supply in the event of groundwater contamination. The Town must still protect its water supply against over-utilization and contamination. Two additional well sites have been identified and tested by the Water District. One is on a large esker north of Lake Shirley and the other is located off Goodrich Street, near the geographic center of Town.

The Town has adopted a Water Supply Protection Bylaw as part of its Zoning Bylaw. The Bylaw serves to protect not only the well sites and potential well sites, but also the aquifers in which they are located, and the drainage area in which the aquifer is located. It has recently been revised to provide further protection for the Town's limited water supply. In addition, in 1997, the Department of Environmental Protection approved a Zone II map associated with the Town's well sites, which is on file in the office of the Planning Board. In Zones I and II uses such as junkyards, commercial car washes, and similar uses which may contaminate the groundwater are prohibited. All other uses, except single family residences are subject to conditions designed to protect ground water.

The Town of Lunenburg should work closely with the Lunenburg Water District to protect present water supplies and to plan for future needs.

SEWER The implications of sewers on growth were evaluated in the Sewer Impact Study and the Town has implemented, for the most part, the recommendations of the Study. Connection has been made to Fitchburg and sewers provided on Massachusetts Avenue to Lunenburg Crossing have been completed. There is still negotiated growth within that system for Lunenburg Nominee Trust and for Maplewood/Blueberry properties, as well as White Street and Maple Parkway. Connections to Leominster have been negotiated for the Town Center and Whalom via Leominster Road and other remaining problem areas have been reviewed. The Sewer Master Plan is being implemented in its first stage. The Town proceeds with the Sewer Master Plan.

CIRCULATION See special element. Note: A study shall be initiated when the new center structure of expansions designs have been approved to insure safe circulation.

IMPORTANT FACTORS REGARDING FACILITY AND SERVICE  
PLANNING

The implementation section established should serve as a Town design. The Town citizens determine the direction by vote. This determination affects the ability to fund, which by right, belongs to the Community.

Continued consideration should be given to the recommendation of the Financial sector of our Town Government, the Chief Financial Officer, Financial Analysis Committee, Capital Planning Committee, Finance Committee, and the Board of Selectmen (the Chief Administrative Officers).

MGL Chapter 40A confers upon the Planning Board the responsibility of providing the Community with a Master Plan. The Master Plan has nine elements. This Element, Community Facility and Service, is presented as part of the opening development in the Community.

The Board of Selectmen and the Planning Board, along with respective Facility Building Committees, should act as a Coordinating Committee to establish general guidelines and evaluation criteria for facilities including locations, land requirements, circulation, architectural style, parking and etc. These Boards and the Financial Departments should be involved in seeking the planning and construction funding sources. Financing of all facilities should include an economy of scale, and wherever possible, Town land should be utilized to save land acquisition costs.

All Facility Building Committee appointments shall be according to the Charter and the Town Bylaw. The implementation of this Element in conjunction with the other Elements of the Master Plan, will design a working center reflecting a New England Town Character as desired by the citizens of Lunenburg, and provide a growth factor to balance the needs into the first quarter of the new Millennium.

## COMMUNITY FACILITIES AND SERVICES EVALUATION

**Table 6-1**

<i>Recommendations</i>	<i>Goals Satisfied<sup>1</sup></i>	<i>Issues Addressed</i>	<i>Evaluation of Strategy</i>
<b>SEWERS</b>			
Continue Construction Connect to Leominster	•	Public Health	Effective
Baker Station and Lower Massachusetts Avenue	•	Public Health	Effective
Hickory Hill Area and Lake Shirley Area	•	Public Health	Effective
Update Inter-municipal Agreements	•	Efficiency	Cost Effective
Establish Communication with Devens Center relative to connection to Waste-water Treatment Plant	•	Public Health	May Be Cost Effective
Extend Sewers to Industrial Areas	•	Economic Development	May Be Cost Effective
<b>SCHOOLS</b>			
Continue Building Committee Construct New PK-2 Primary School Close Primary School on School Street Plan to convert Passios Elementary School to Grades 3-5 Update Plan to renovate Turkey Middle School for Grades 6-8 Plan addition to/renovation of High School		Adequate Space	Efficient

Note: For Open Space and Recreation and Circulation, See Respective Elements

<sup>1</sup> Goals are: Plan and Implement Enhancement and Maintenance of Municipal Services, Develop a Community Center Concept, Create a Municipal Financial Development Plan and Improve the Town Road System.

## COMMUNITY FACILITIES AND SERVICES EVALUATION

Table 6-1 (continue)

<i>Recommendations</i>	<i>Goals Satisfied</i>	<i>Issues Addressed</i>	<i>Evaluation of Strategy</i>
<b>PUBLIC SAFETY</b>			
Select Site for Public Safety Building	•	Space Need	Pro-active
Prepare Plans for Public Safety Building	•	Space Need	Efficient
<b>LIBRARY</b>			
Prepare Plans for Expansion (New Building or Addition)	•	Space Need	Pro-Active
<b>TOWN ADMINISTRATION</b>			
Study School Building on School Street and/or other options	•	Space Need	Enhance Town Center
<b>HICKORY, PARK, CEMETERY</b>			
Develop Plans for Public Works Department	•	Space Need	Safety Efficient
Renovate Town Beach Building	•	Completes work in Process	Cost Effective
Consider New Park Improvement Plans	•	Space Need Expanded Service	Satisfy Need
Continue Cemetery Improvement Plans	•	Need for Improved Space	Satisfy Need
Renovate Cemetery Building	•	Efficiency Appearance	Satisfy Need



## CIRCULATION

### Introduction

Lunenburg is bisected by Route 2A (Massachusetts Avenue), which, prior to the construction of Route 2, was the principal road through the region. Route 2, south of Lunenburg, is now the principal artery providing access for commuters to the interstate highway system and to the Worcester and Boston areas.

There are six miles of State roads in Lunenburg, on Route 2A (east-west) and Route 13 (north-south). These routes provide linkage larger roadways and serve as commuter corridors. With the development of Lunenburg Crossing, these roads also serve as feeder roads for retail shoppers from within Town and adjacent communities (Leominster, Townsend, Fitchburg, Ashby).

There are 109 miles of accepted Town roads, varying from paved, well-traveled streets to roads in outlying regions that are not up to current standards. The Town has a *Road Improvement Plan* that should be followed. The Plan, on file with the Public Works Department, highlights the following improvements:

- Traffic lights at the Route 13 and Whalom Road intersection.
- Road reconstruction and drainage improvement on Route 13, from the Leominster line to Route 2A.
- Repaving of Elmwood Road, Flat Hill Road, Page Road to Elmwood, and part of Reservoir Road in 1999.
- Repaving of the rest of Reservoir, ten other streets, and the Lakefront rotary in 2000, and a continuing pavement program underway in 2001.

Transportation system design and conflict resolution are among the major components of municipal master planning. The trends in vehicle use in American society continue to place a great reliance upon vehicle use for wage earners. Vehicle miles in the United States are growing far more rapidly than the population is. Between 1970 and 1990, vehicle use increased from 98.4% of the population growth to 225%.<sup>1</sup> The Montachusett Regional Planning Commission reports a general traffic increase of 1.7 percent per year, although counts are down in Lunenburg. This may be because north-south traffic is avoiding the signal lights.<sup>2</sup>

<sup>1</sup> *Selected Highway Statistics and Charts*, Federal Highway Administration, as quoted in *Land Works*, Volume II, Issue 2, April 1999, American Farmland Trust.

<sup>2</sup> Telephone interview with Montachusett Regional Planning Commission, August 8<sup>th</sup>, 1999.

*Circulation Element*

The importance of transportation system design varies greatly from one community to the next for a number of reasons. Chief among causal factors are population, location, and topographic features. Lunenburg and surrounding regions are experiencing a steady increase in building activity, some of which is within the bounds of the Town. Traffic increases resulting from community growth are easily observed and understood. Development beyond the community is sending an increasing number of vehicles through Lunenburg. These external generators must be considered, as they impact Lunenburg's streets. In addition to the through traffic, Wal-Mart and other uses along Route 2A are attracting traffic to Lunenburg. See **Table 6-1** for Lunenburg traffic counts.

### **Importance of the Circulation Element**

The *Circulation* Element is important to the Town so that it may

- Reduce the perception of traffic
- Maintain and improve Town roads
- Adopt measures that assure maintaining the semi-rural character of roads.

See Land Use Element, Map 2-1 for a Street map.

## Traffic Counts for Lunenburg MA

Table 6-1

Station Location Number	Route/Street	Location	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
3049	Lakefront Road	At Leominster City Line		2,166			1,800			1,100			1,400
3017	Main Street	North of Route 2A			2,300			3,300					
3315	Pond Street	East of Route 13			630			910			2,400		
3316	Prospect Street	South of Pond Street		2,873			1,700			2,200			2,900
S002	Route 2A	West of Rtes. 2A & 225			5,840								
3045	Route 13	At Leominster City Line	9,074	9,645		11,000	10,000		13,000	11,500		11,000	11,000
3050	Route 13	At Townsend Town Line	8,093	8,612	8,200	9,500	8,400	8,200	8,900	9,500	8,800	9,100	9,400
3048	Summer Street	South of Whalom Road			9,900	10,000		9,000				8,400	
3260	West Street	Between Pleasant & Pratt Streets			620			650			620		
3047	Whalom Road	East of Graham Street			4,100			4,100			3,700		
3046	White Street	At Fitchburg City Line	2,297	1,907		2,100	2,000		2,400	1,900		2,200	1,800

Source: Massachusetts Highway Department, updated July 24, 2000

## Circulation Issues in Lunenburg

Because Lunenburg's street pattern is an already established one, the major issues of the *Circulation Element* are

- A. Traffic
- B. Public Transportation
- C. Standards For Construction And Design

### A. Traffic

Major traffic east and west is on Route 2A, which goes through the Town Center. The long-standing traffic problem in the Center has been addressed by design improvements and installing a traffic light. Ideally there would be a bypass of the Center, but historic development and recent growth preclude this option. Lacking a bypass, development of the Town Center must be particularly sensitive to traffic generation and traffic conflicts [see *Community Services and Facilities Element*].

Major north – south traffic is on Lancaster Road and on Route 13 (Chase Road, Massachusetts Avenue, to Electric Avenue). A connector from Chase Road to Electric Avenue was proposed in the Benjamin Report and may still be feasible; however, there is now signalization in the area, which has reduced the need for the connector.

### B. Public Transportation

Commuter Rail connections in Fitchburg and Leominster link Lunenburg residents with employment and retail services in municipalities as far west as Gardner and as far east as Boston. The Montachusett Area Regional Transport (MART) services Lunenburg Crossing from Fitchburg, allowing patrons access to this commercial center without the use of automobiles.

### Regional Transportation

In addition to regional Commuter Rail connections and MART services, Lunenburg is located close to the Worcester Airport. The airport witnessed extensive growth in passenger service in the late 1980's and early 1990's. However, ground access problems and competition from Green Field Airport in Rhode Island and from the Manchester Airport in New Hampshire (now New England's third largest airport) has limited Worcester Airport's potential for expansion.

Those who oppose further expansion of Boston's Logan Airport have suggested channeling air traffic into Worcester. Worcester Airport spent \$25 million in 1993 to improve the runway and build a new terminal, and in 1996 spent \$8 million more for new equipment<sup>3</sup>. According to Massport, the expanded use of Worcester Airport will necessitate an access road. This road has been the center of much local controversy. Another proposal has been to use the airport at the former Fort Devens for business flights.

During the rapid increase in real estate prices in the 1980's, the regional transportation system made it possible for people seeking relatively low housing prices compared to prices in communities nearer to Boston to move to Lunenburg and commute to the employment centers located along Route 495, Route 128, and in the cities of Worcester and Boston. The highway and commuter rail systems thus contributed to growth pressure that is facing the Town in recent decades. Potential expansion of the Worcester and Fort Devens Airports could further increase this pressure.

### C. Standards For Construction and Design

In the *Rules and Regulations Governing the Subdivision of Land* the Planning Board has listed the complete standards for construction of driveways, sidewalks and streets. Street standards are also those the Board of Selectmen has adopted for new Town roads. Because these standards are so complete, and because most new streets are built by developers in order to serve their developments, and because the Commonwealth maintains major traffic routes, street pattern and street construction require little additional attention in the *Master Plan*. Attention is needed, however, to maintaining and improving Town roads and to adopting measures that assure maintenance of the semi-rural character of the roads.

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<sup>3</sup> *Wall Street Journal*, July 14, 1999, Page NE 1.

The Planning Board's *Rules and Regulations Governing the Subdivision of Land* includes four categories of streets, listed below. The design and construction standards for these roads also apply to all new construction.

**Street Categories:**

- Minor (serving less than ten dwelling units)
- Intermediate (100 to 400 trips per day)
- Secondary (intercepting one or more streets, and generally carrying over 400 vehicle trips per day)
- Major (a thoroughfare with heavy volume of traffic, generally over fifteen hundred vehicle trips per day)

Parking and off-street loading areas for new construction are subject to the design requirements of the Zoning Bylaw and of the Planning Board. There are no incentives to improve existing areas.

**Sidewalks**

Sidewalks are required to be in the street right-of-way, and thus are generally parallel to the pavement. Bikeways and walkways are subject to specifications for sidewalks.

*The lack of a sidewalk on the north side of Massachusetts Avenue between school areas and the Town Center is a significant safety concern. Other areas of Town could benefit from the addition of sidewalks, but that stretch is the Number One priority, however. The area receives a significant amount of pedestrian traffic, much of which is children.*

## Goals

Circulation is not viewed as a major issue by residents of the Town and was therefore given little attention in the *Visioning* process. It was commented upon that "gateways" to the Town should be improved, and that the Center should be more pedestrian friendly. In addition, one of the tasks under the heading Community Service, Housing and Facilities Infrastructure is "*to improve the Town's road system*".

The corresponding objectives listed there are to

- Review and prioritize the road improvement plan
- Broaden the road improvement plan
- Conduct a needs assessment to determine priorities and safety concerns
- Determine availability of increased state funding

The Planning Board has accepted a Goal "*to develop a circulation system consistent with the Town character*", and they have developed regulations that reflect this Goal. These regulations are generated in the *Rules and Regulations Governing the Subdivision of Land*, where the design and construction standards for streets, sidewalks and driveways are listed along with regulations for design and construction of off-street parking and loading areas. To assure safe site lines, intersection design requirements were developed.

Additional **Goals** include

- Controlling the rate of traffic growth.
- Eliminating safety hazards such as uncontrolled curb cuts.

## Recommendations

*Envision* recommended an action plan to "ascertain the status of road system and update road improvement plan" by: initialing a study with the Capital Planning Committee, Board of Selectmen, and Director of the Department of Public Works, which will provide the following:

1. A long-range road needs assessment
2. A prioritized list of improvements, based on safety and traffic flow conditions
3. A plan reflecting all available funding for the prioritized road improvement plan list, and assign dollars to each project

Although the Town does not have Circulation Goals, its residents are conscious of their Town's quality and appearance. Their concern is reflected in the following recommendations:

### Recommendations to Relieve Traffic

1. Request that the State post directions on Route 495, Route 2 and Route 2A, that will suggest that traffic use Route 2 so that through traffic will be reduced.
2. Consider zoning that is based on the number of trips to be generated per acre to reduce the amount of traffic generated at non-residential sites.

### Recommendations to Improve Maintenance:

1. Adhere to the Town Pavement Plan
2. Continue to enforce local regulations

### Other Recommendations:

1. Improve the Lunenburg gateways with suitable signage and landscaping
2. Provide bicycle parking at public building sites
3. Enforce access according to the standards of the Americans with Disabilities Act



**Recommendations for Protecting the Character of the Town:**

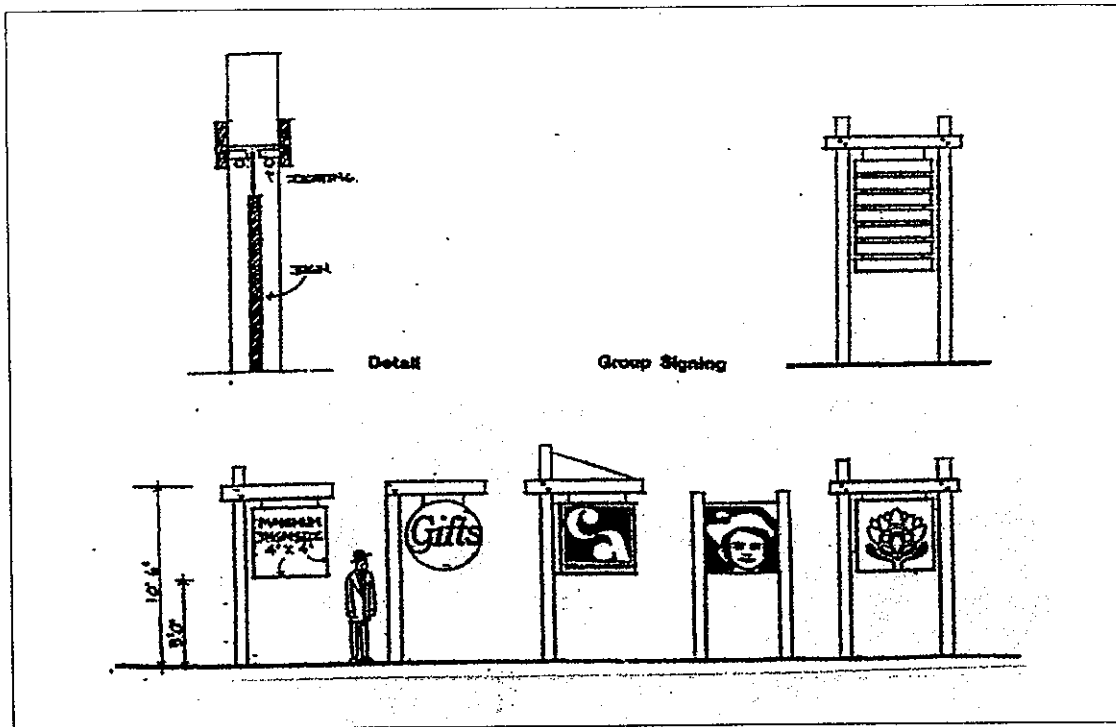
1. Provide plantings at the entrance of Town, to slow traffic and introduce Lunenburg's quality of life to visitors
2. Upgrade existing parking at commercial and public sites, especially on Route 2A
3. Limit curb cuts, especially along Route 2A
4. Develop a Town Center Plan (See *Land Use* and *Public Facilities* Elements of the Master Plan)
5. Adopt design guidelines for rural sidewalks that are not parallel to the edge of the street pavement, for inclusion in the *Rules and Regulations Governing the Subdivision of Land*



Example of rural sidewalks that are not parallel to the edge of the street pavement.

Photograph from *Performance Streets, A Concept and Model Standards for Residential Streets*, Bucks County Planning Commission, April, 1980

## 6. Enforce sign regulations and encourage uniform signage

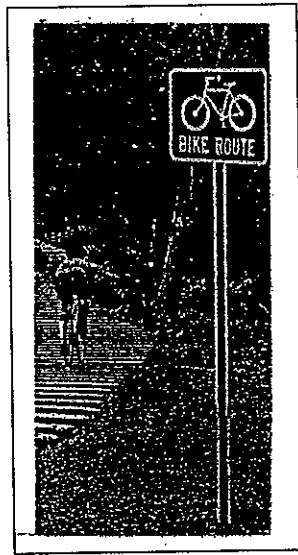


Examples of Uniform Signage

Illustration from *Improving Highway Business Areas*, Local Assistance Series, Massachusetts Department of Community Affairs, Thomas Planning Services and Universal Engineering Corporation, 1977

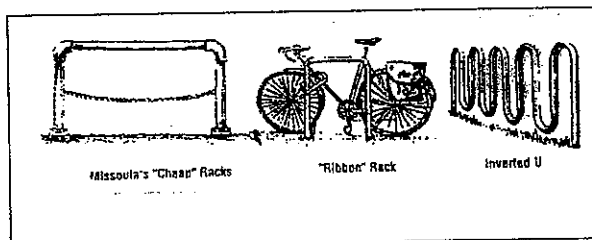
**Recommendations To Provide Better Service and/or Circulation:**

1. Work with MART to expand its use to residents, not just the elderly.
2. Improve existing street parking and loading areas, particularly in the Southwest Section of Town.
3. Create uniform placement of street signs with clear visibility lines and plantings at the base only.
4. Create handicapped-accessible bikeways and trails, coordinated with the Open Space and Recreation Plan, Town facilities, and the Town Center stores, offices, and Post Office.



Source: Photograph from Bicycle Forum, Autumn 1978, Number 2, *The Bicycle Federation*, Silver Springs, MD, under sponsorship of the US Department of Transportation

5. Establish standards for bicycle stands and bicycle parking in parking areas for the *Rules and Regulations Governing the Subdivision of Land*.



Source: Illustration of bicycle rack styles from Bicycle Facility Planning, PAS-459, American Planning Association, 1995

## Other Suggested Design Improvements

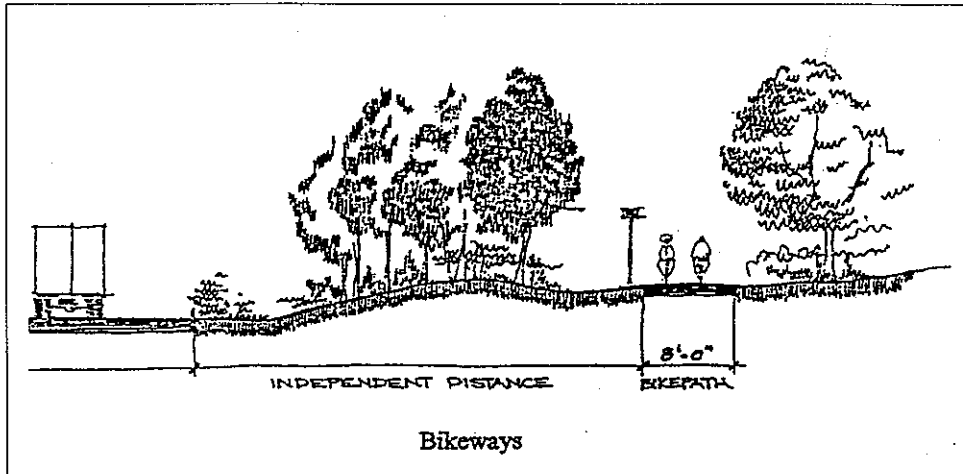


Illustration from *Bikeways: Definition*, Massachusetts Department of Public Works, Boston, April 1975

Recommended Goals are listed in Table 5-2.

## Circulation Element

Table 5-2

Circulation Recommendations	Goals and Policies				
Improve the Road System	Broaden, or Review and Prioritize the Road Improvement Plan	Conduct a Needs Assessment to Determine Priorities and Safety Concerns	Determine Availability of Increased State Funding	Eliminate Safety Hazards	Develop Standards Consistent with Town Character <sup>4</sup>
Initiate study of street improvements with Capital Planning Committee, Board of Selectmen, and Public Works Department	•	•	•		
Consider zoning based on trips per day				•	
Reduce traffic in non-residential areas				•	•
Here to the Town pavement plan	•				
Continue to enforce local regulations	•			•	•
Adopt design guidelines for rural sidewalks, permitting sidewalks not parallel to street edges.	•			•	
Create and coordinate handicapped-accessible bikeways and trails			•		•
Establish standards for bicycle stands and bicycle parking in parking areas				•	•
Work with MART to expand its use for residents					•
Limit curb cuts, especially along Route 2A				•	

## Circulation Element

Table 5-2 continued

Circulation Recommendations	Goals and Policies				
Improve the Road System, continued	Broaden, or Review and Prioritize the Road Improvement Plan	Conduct a Needs Assessment to Determine Priorities and Safety Concerns	Determine Availability of Increased State Funding	Eliminate Safety Hazards	Develop Standards Consistent with Town Character <sup>5</sup>
Route 2A improvements, including parking areas					•
Adopt standards for public parking areas					•
Review and enforce sign regulations and encourage uniform signage				•	•

<sup>5</sup> Not from *Envision*

## CIRCULATION STRATEGY EVALUATIONS

Table 5-3

<i>Strategy</i>	<i>Goal Satisfied</i>	<i>Issues Addressed</i>	<i>Evaluation of Strategy</i>
Long Range Needs Assessment	•	Prioritized list of Improvements	Aids in Circulation Planning
Develop prioritized list of improvements	•	Prioritized list of Improvements	Low Cost
Establish a long range budget for improvements	•	Budget which reflects Plan	Low Cost
Request State to Post Directions	•	Traffic Relief	Low Cost
Consider Zoning based on traffic generation	•	Traffic Relief	Low Cost Difficult to Enforce
Reduce Non-residential traffic generated	•	Traffic Congestion	Difficult to Enforce
Adhere to plans and enforce regulations	•	Safety	Low Cost
Improve gateways to Town	•	Appearance	Low Cost
Provide bicycle parking	•	Vehicular trip Reduction	Low Cost
Enforce ADA Regulations and increase handicapped accessibility	•	Safety	Low Cost
Upgrade parking areas	•	Safety Appearance	Primarily Private Cost
Limit curb cuts	•	Safety	Low Cost
Improve street signage	•	Safety	Moderate Cost

**CIRCULATION STRATEGY EVALUATION (continue)****Table 5-3**

Work with Mart to expand service	•	Convenience Safety	Moderate Cost
Improve loading areas	•	Safety Appearance	Primarily Private Cost



## IMPLEMENTATION

### The Lunenburg Master Plan

Lunenburg's first *Master Plan* was prepared in 1961 and updated in 1983. The Planning Board has been preparing this third update over several years' time, assisted by its planning consultant. The Planning Board has also established committees to help it update the Plan, including Committee on Housing and Capital Budgeting and most recently, a committee that will determine the Town vision for 2007 and then establish Goals to achieve the vision. At the same time, the Planning Board has been evaluating Town sewers and their impact on community character and growth.

In connection with this new Master Plan, the Planning Board conducted an Envision Study to develop the community vision for 2007 and reviewed previously established goals and policies to set the framework for the Master Plan. The Vision is the community consensus or "perception" of the kind of town it desires to be. Goals are the means to attain the Vision. Goals provide sense of direction. Policies are guidelines and principles that are used to achieve the Goals. The Lunenburg Planning Board held several forums to develop Lunenburg's Vision, Goals and Policies.

The Master Plan is a guide to assist the Town to realize its vision and a basis to provide means to evaluate progress.

A *Master Plan* is defined by Massachusetts General Laws as a "Statement, through text, maps, illustrations, or other forms of communication, which is designed to provide a basis for decision-making regarding the long-term physical development of the municipality." [Chapter 41, section 81-D] The Planning Board of a town is charged with developing the Master Plan and maintaining it in an updated currency. The statute lists the parts of a Plan as consisting of *Goals* (that are created through an interactive public process), and *Elements*, on *Land Use*, *Housing*, *Economic Development*, *Natural Resources*, *Open Space*, *Services*, and *Circulation*, and a final section presenting recommendations for *Implementation* of the plan.

To achieve Lunenburg's goals, policies and vision, the Master Plan proposes the following actions be taken, and identified the responsible Town Board, Offices, or Committee. It also identifies funding sources as well as suggesting the phasing of these actions.

## Implementation Summary

Table 7-1

RECOMMENDATIONS (Listed in Their Primary Categories)	RESPONSIBLE AGENCY	FUNDING	PHASE I	PHASE II	PHASE III
<b>LAND USE</b> See also Elements of <i>Housing, Open Space and Recreation, Natural and Cultural Resources</i>					
Expand and adopt design guidelines for commercial uses; Route 2A, Town Center, and the Whalom Area	Planning Board	Grant	●		
Develop Town Center Plan	See <i>Community Facilities and Services</i>				
Reinforce Sense of Place by developing a Center Plan, Signage, and Public Facilities	Planning Board	Operating Budget	●	●	
Landscape the gateways to Town	Conservation Commission, with Citizen participation	Volunteer	●		
Control size and styles of signs	Planning Board, Zoning Bylaw, and Enforcement Agents	Operating Budget	●	●	●
Increase Setback in outlying areas	Planning Board, Town Meeting (Zoning Bylaw)	Operating Budget	●		
Monitor rate of growth	Planning Board	Operating Budget	●		
Increase non-residential tax revenue by adopting measures to improve the quality of business and industrial areas.	Planning Board, Board of Selectmen, Town Meeting	Operating Budget		●	
Encourage cluster development	Planning Board, Zoning Bylaw, Town Meeting	Operating Budget	●		
Develop guidelines for the identification of rural roads	Planning Board, Public Works Department	Operating Budget	●		
Augment the land use enforcement process	Planning Board, Board of Selectmen	Operating Budget	●		
Prepare outreach program through "Simplified Permitting" procedure and media presentations	Planning Board, Other Land Use Boards	Operating Budget		●	
Establish purpose for zoning districts	Planning Board	Operating Budget	●		

RECOMMENDATIONS (Listed in Their Primary Categories)	RESPONSIBLE AGENCY	FUNDING	PHASE I	PHASE II	PHASE III
<b>LAND USE continued</b>					
Enforce environmental regulations	Board of Selectmen, Conservation Commission, Board of Health	Operating Budget	•	•	•
Map areas subject to Rivers Protection Act	Conservation Commission	Operating Budget	•		
Adjust zoning according to recommendations from the Sewer Plan	Planning Board, Sewer Commission, Town Meeting	Operating Budget	•		
Establish guidelines to protect meadow, water bodies, vistas, and hilltops	Planning Board, Conservation Commission	Operating Budget	•		
Discourage use of abrasive styles and appearances	Planning Board, Zoning Bylaw, and Regulations	Operating Budget	•	•	•
<b>HOUSING</b>					
Coordinate activities of Town planning and housing coordination in the office of the Planning Board	Planning Board	Operating Budget	•	•	•
Apply for Grants	Planning Board, Housing Authority	Operating Budget	•		
Develop a Housing Education Program	Planning Board, Housing Authority	Grant		•	
Establish a clearing house for affordable housing listings	Planning Board, Housing Authority	Grant		•	
Inform developers of opportunities	Planning Board, Housing Authority	Operating Budget	•	•	•
Encourage Planned Development	Planning Board	Operating Budget	•	•	•
Adopt ZBA rules for 40B Applications	Zoning Board of Appeals, Planning Board	Operating Budget	•		
Establish stronger code enforcement	Board of Selectmen, Building Official	Warrant Article	•		
Provide sewers or alternative systems to areas needed (Continuation of Town programs)	Sewer Commissioner, Town Meeting	Warrant Article		•	•

RECOMMENDATIONS (Listed In Their Primary Categories)	RESPONSIBLE AGENCY	FUNDING	PHASE I	PHASE II	PHASE III
<b>HOUSING</b> continued					
Promote starter homes to developers	Planning Board	Operating Budget	•	•	•
Inventory vacant developable land	Planning Board	Operating Budget	•		
Investigate creating a Zoning Bylaw to allow conversion of large buildings and/or homes	Planning Board	Operating Budget	•		
Promote Assisted Living	Planning Board, Town Meeting	Operating Budget	•		
<b>OPEN SPACE AND RECREATION</b> See also <i>Open Space and Recreation Plan</i>					
Acquire land to connect open space, especially along the north boundary of Town	Conservation Committee	Grant/Gift		•	•
Establish a fund to acquire Tax Title and Chapter 61A land	Board of Selectmen, Town Meeting	Warrant Article	•		
Instigate forest management plan	Conservation Committee, Forestry Committee	Operating Budget	•	•	•
Establish a routine maintenance plan for conservation areas	Conservation Committee	Operating Budget	•	•	•
Initiate a wetlands protection plan in addition to Wetlands Protection Bylaw	Conservation Committee	Operating Budget	•	•	•
Build/Rebuild Trails	Conservation Committee	Operating Budget	•	•	
Establish an Open Space and Recreation information program	Conservation Committee	Operating Budget	•	•	•
Encourage trails use	Conservation Committee	Operating Budget	•	•	•
Improve parking at Cowdrey Land	Conservation Committee	Warrant Article			
Add bicycle parking standards in the off-street parking regulations	Board of Selectmen, Planning Board	Operating Budget	•		
Establish rural sidewalk standards in Planning Board regulations	Planning Board	Operating Budget	•		
Upgrade existing Park facilities	Park Commission	Warrant Article	•		

RECOMMENDATIONS (Listed in Their Primary Categories)	RESPONSIBLE AGENCY	FUNDING	PHASE I	PHASE II	PHASE III
<b>OPEN SPACE AND RECREATION</b> continued					
Provide additional facilities for tennis, soccer, softball, baseball, skating, and basketball	Park Commission	Warrant Article	•	•	
Provide recreational facilities, such as shuffleboard and walking trails, for Senior citizens	Park Commission	Warrant Article		•	
Plan for a future Recreation Building	Board of Selectmen, Planning Board, Park Commission	Grant		•	
Construct boat ramps	Park Commission	Grant			•
<b>CIRCULATION</b>					
Work with MART to expand its use to residents	Planning Board, Board of Selectmen	Operating Budget	•		
Create and coordinate handicapped accessible bikeways and trails	Conservation Commission	Gift/Grant		•	
Establish standards for bicycle stands and parking for parking areas (See also <i>Open Space and Recreation Plan</i> )	Planning Board	Operating Budget	•		
Monitor curb cuts	Planning Board	Operating Budget	•		
Improve parking areas along Route 2A, including egress, ingress, and landscaping	Planning Board	Grant		•	
Develop a Town Center Plan	Planning Board, Board of Selectmen, Town Meeting	Grant, Bond Issue, Warrant Article	•	•	
Review and enforce signage controls	Planning Board, Board of Selectmen	Operating Budget	•	•	•
Initiate study of street improvements	Board of Selectmen, Capital Planning Committee, Public Works Department	Operating Budget	•		
Consider zoning based on trips per day	Planning Board	Operating Budget	•		

RECOMMENDATIONS (Listed in Their Primary Categories)	RESPONSIBLE AGENCY	FUNDING	PHASE I	PHASE II	PHASE III
<b>CIRCULATION</b> continued					
Initiate study for reduction of traffic in non-residential areas	Board of Selectmen, Capital Planning Committee, Public Works Department	Review Fees	•	•	•
Adhere to the Town Pavement Plan	Public Works Department	Operating Budget	•	•	•
Continue to enforce local regulations	Board of Selectmen, Police Department	Operating Budget	•	•	•
Adopt design guidelines for rural sidewalks, permitting sidewalks that are not parallel to street edges	Planning Board	Operating Budget	•		
Encourage upgrading of private parking areas	Planning Board	Private Funds	•	•	•
Upgrade existing public parking areas	Board of Selectmen, Public Works Department	Operating Budget, Warrant Article		•	•
<b>COMMUNITY FACILITIES AND SERVICES</b>					
Implement Town Center Plan: Library Expansion, Town Offices, School Street Parking, Land Acquisition	Board of Selectmen Planning Board, School Department, Police Department, Fire Department, Library Trustees, Town Meeting	Grant, Warrant Article	•	•	
Implement School Plan	School Committee, Town Meeting	Grant, Warrant Article	•	•	
Expand North Cemetery, renovate cemetery building	Board of Selectmen, Cemetery Commission, Town Meeting	Available Funds, Fees	•	•	
Continue implementation of sewer plan	Board of Selectmen	Warrant Article, Fees	•	•	•
Continue Renovation of Town Beach Building	Park Commission	Warrant Article	•	•	

RECOMMENDATIONS (Listed in Their Primary Categories)	RESPONSIBLE AGENCY	FUNDING	PHASE I	PHASE II	PHASE III
COMMUNITY FACILITIES AND SERVICES continued					
Develop Public Safety building complex	Board of Selectmen, Planning Board, Capital Planning Committee, Fire Department, Police Department		•	•	

